A Year Better
ICT FOR BETTER LIFE

WORK PACKAGE 2

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

Country Report at EU Level

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Prepared by:

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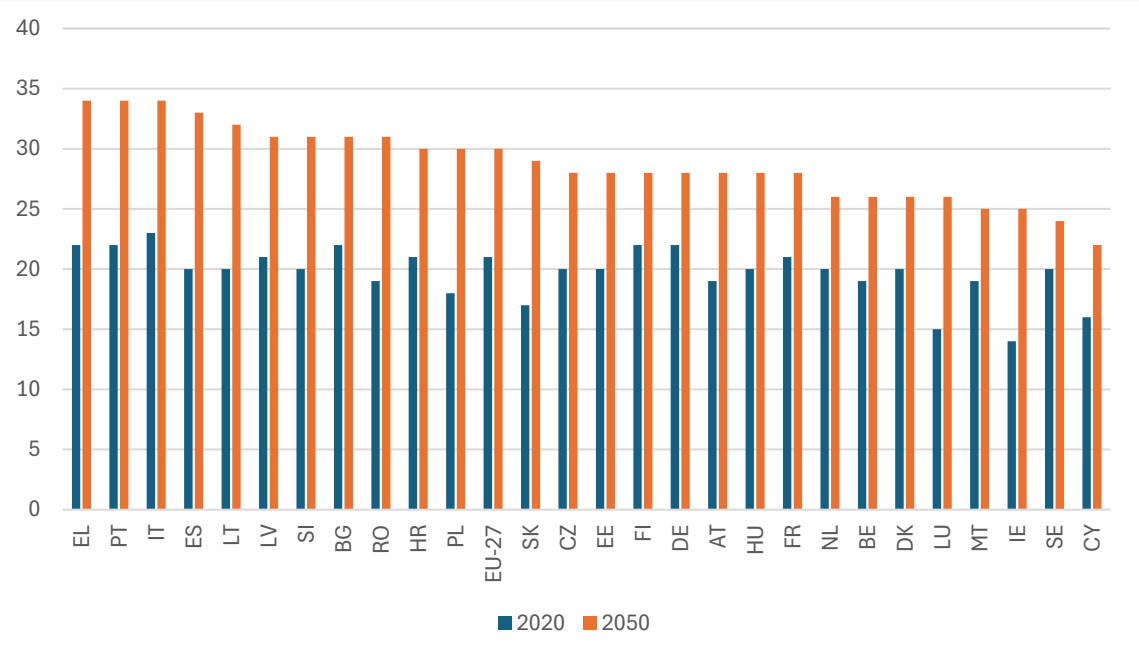
1. Introduction

In the last two centuries, the world's population has grown from around 1 billion to 8 billion people. Better health care, the use of vaccines, technological progress, etc. have led to longer life expectancy, which has had a positive effect on the increase in the world's population. Exhibit 1 shows the proportion of the total population aged over 65 in 2020 and projections for their proportion in 2050 in the European Union. In 2020, the proportion of over-65s in the total population in the 27 countries of the European Union was 21%, while by 2050 this proportion is estimated to average 30%. In other words, it is estimated that by 2050, 11 countries will have more than 30% of their population aged over 65, which is the average for the 27 European Union member states. At the top of the list are Greece, Portugal and Italy with an estimated share of 34%, while countries such as Cyprus and Sweden are at the bottom of the list with an estimated 22% and 24% of the total population aged over 65 respectively.

Exhibit 1. People aged 65+ in the EU-27 in 2020 and projected for 2050 (% of total population)



Source: European Union Agency for Fundamental Rights, Fundamental Rights of Older Persons: Ensuring Access to Public Services in Digital Societies, 2023

The above-mentioned trends in the growth of the elderly population can be observed in all Member States of the European Union and pose certain challenges, such as the sustainability of

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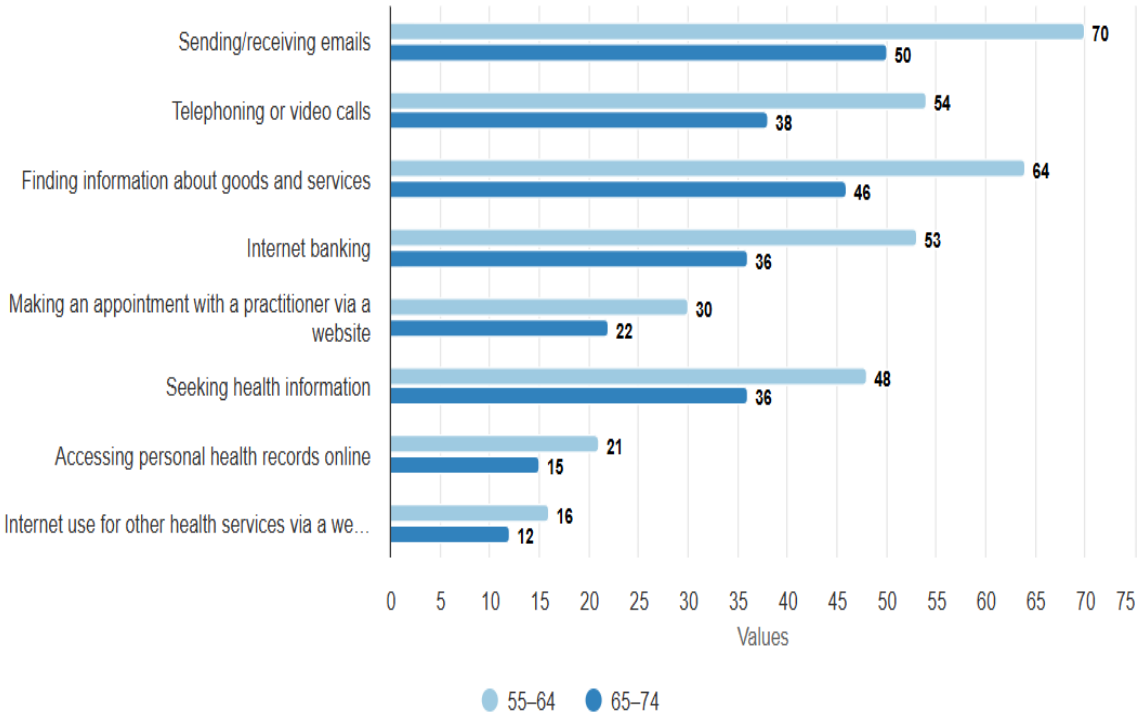
pension systems, health care for the elderly population, etc. However, the question arises to what extent members of the older population use digital tools and how their use affects their mental health.

Exhibit 2. Online activities by older people in 2022 in the EU-27, by age groups (%)



Source: European Union Agency for Fundamental Rights, Fundamental Rights of Older Persons: Ensuring Access to Public Services in Digital Societies, 2023

People aged 55 to 64 use digital technologies most frequently to send/receive emails (70%), to search for information about goods and services (64%), to make phone or video calls (54%) and for internet banking (53%) (Exhibit 2). On the other hand, this age group is least likely to use the internet to access personal health records online (21%) and for other health services (16%). An analysis of the data for the older age group (65-74 years) shows that the order of activities is completely identical: this age group uses digital technologies equally for internet banking and seeking health information (36%) (Exhibit 2).

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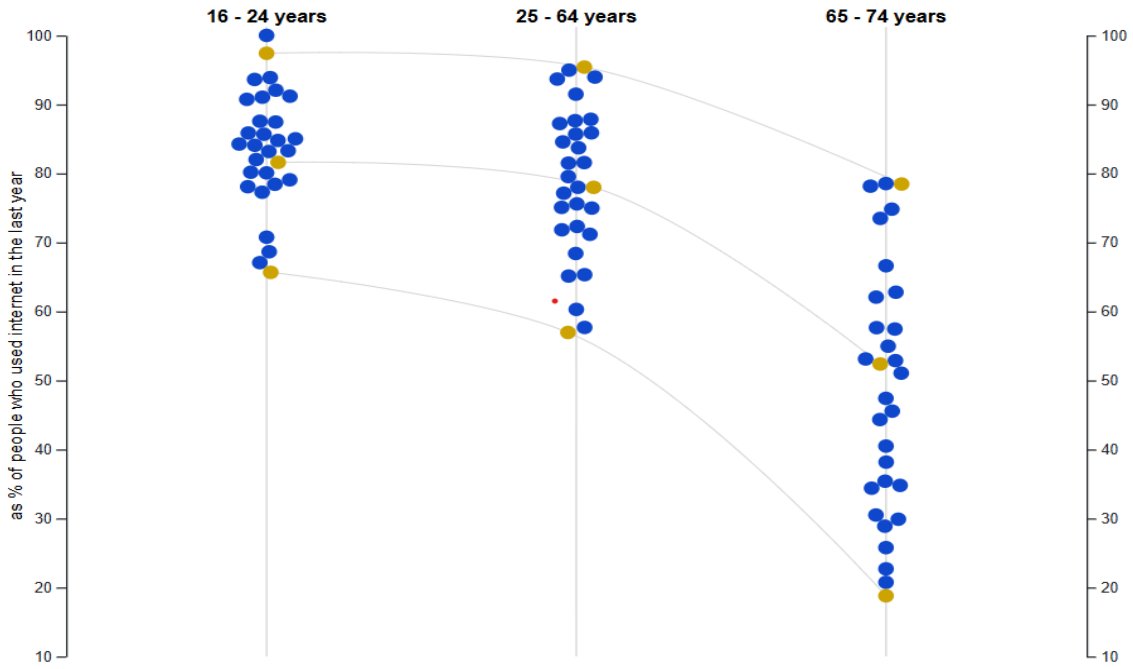
2. Key Findings

A literature review has revealed certain trends in the digital literacy of the older population. In Annex 3 the percentage of people purchasing products and services online in three age categories in 2022 can be seen. Focusing on the 65-74 age category, the Netherlands performed best in 2023 (first yellow dot: 78.5%) and Bulgaria performed worst (third yellow dot: 19.1%), while the average for the 27 EU countries was 52.4% (second yellow dot). In the second age category (25-64), the Netherlands was again the best-placed country (95.2%), while in the first age category (16-24) it was in second place (97.4%). On the other hand, Bulgaria was again at the bottom of the ranking in the remaining two categories with 65.7% in the first age category and 57% in the second category. The EU27 average in the first age category was 81.6% and in the second age category 78%.

Exhibit 3. People buying goods or services online (as % of people who used internet in the last year - 2023)



Source: https://ec.europa.eu/eurostat/web/interactive-publications/digitalisation-2024#online-activities (Accessed March 25th, 2025)

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In addition, Wilson, Gates, Vijaykumar & Morgan (2023) highlight several challenges that older people face when using digital tools. In a survey of 20 respondents in England, Scotland and Wales, the authors highlight several responses, of which the following are the most important:

- "*I'm liable, the occasions that I do go on [a desktop computer], I have to scream, help, why can't I get this? Why can't I get that? I don't like [the desktop computer]. I've not grown up with one. I have persevered with [the iPad] and I can adapt. I don't need any [thing other than the iPad]*." **(P018, female, 78 years)**

- "*I don't want everyone to know what I am doing, when I am doing it kind of thing. I think we're more cautious*." **(P002, female, 78 years)**

- "*One thing you do sort of wonder about the technology, how many people can hack in and get to know your business. I'm very wary about internet banking for instance. I don't quite trust that at the minute*." **(P013, female, 79 years)**

- "[*The iPad] is bigger for my fingers*." **(P008, male, 77 years)**

- "*I just read other people's [comments on Facebook]. I can press a little smiley face. Anything where I can just press a button, but I am no good at this typing thing at all … mostly and my hands shaking, they tend to want to press the wrong button and I have to start all over again*." **(P002, female, 78 years)**

The first answer clearly points to a psychological challenge in the form of using a desktop computer. Many pensioners belong to the group of people who have been spared by the digital revolution during their working lives. For this reason, their resistance to using a computer is not surprising. Most of them feel like they are piloting a spaceship when using a desktop computer, which can create a sense of discomfort. The second and third answers indicate possible fear when using a computer.

For pensioners, this fear can have a double effect. If it is a fear of the computer itself, this is a problem that needs to be worked on. However, if it's fear of the computer in the sense that you

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can be scammed by someone, then this kind of fear can be welcome. In the world of cryptocurrencies, advertising, online banking, etc., pensioners are often targeted by financial scammers, and a certain amount of fear can be very good for their own protection. Finally, the fourth and fifth answers point to a challenge in the form of the use of smaller keys and problems with visibility. The digital revolution has led to a reduction in font sizes on various types of cell phones, computers, iPods, etc., which combined with poor eyesight (which is typical for most retirees) can present a major challenge for retirees when using digital tools.

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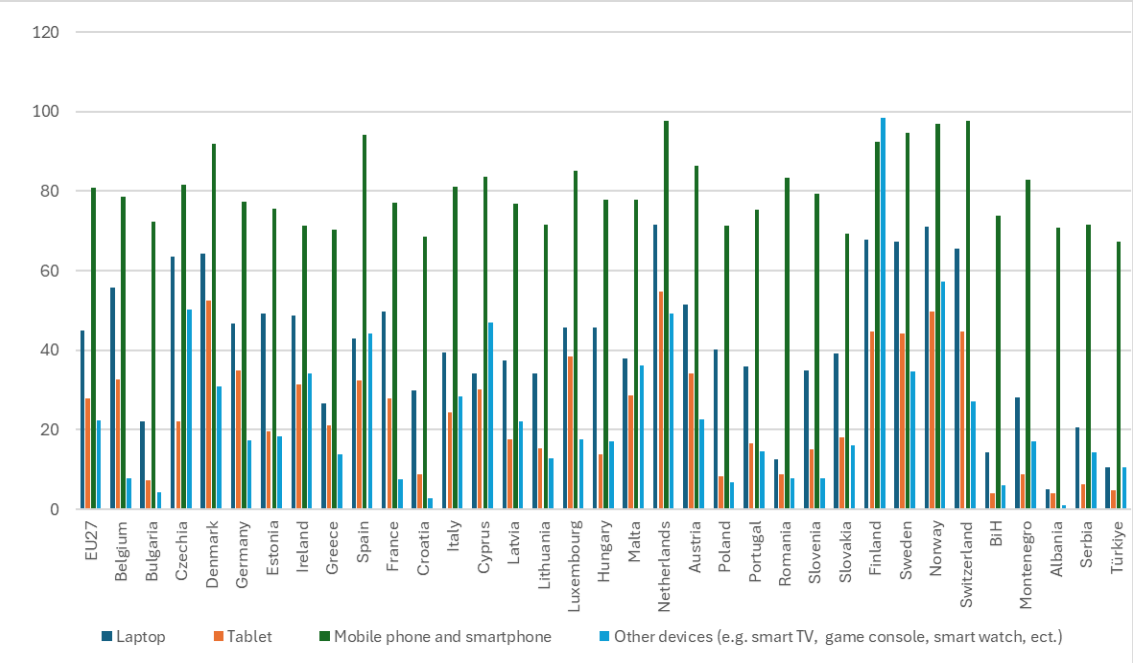
3. Digital Literacy Levels and Access to Technology

Regardless of the challenges and obstacles faced by older people, the growing trend towards the use of digital technologies in the over 55s category is unmistakable. Exhibit 4 and Exhibit 5 provide an analysis of the most used tools for accessing the internet. Among seniors (55-64 years), the use of mobile devices or smartphones is the most common way of accessing the internet in all countries (except Finland). Of all the countries analysed, Switzerland leads the way with 97.60% of seniors (55 - 64) accessing the internet via mobile devices or smartphones, while Turkey brings up the rear with 67.31%. In the case of using a laptop to access the internet, in 2023, members of the older population (55 - 64) used it most in the Netherlands (71.65%), and least in Albania (5%).

Exhibit 4. Types of devices and technologies that seniors (55 - 64 years old) most used in 2023 (as % of individuals used the internet)



Source: Eurostat and systematisation of authors

https://ec.europa.eu/eurostat/databrowser/view/isoc_ci_dev_i/default/table?lang=en

In the tablet category, the Netherlands (54.80%) again achieved the best results and Albania (3.93%), Turkey (4.76%) and Bosnia and Herzegovina (4.04%) the worst. Other devices are used most frequently by senior citizens in Finland (98.46%) and least frequently in Albania (1.08%)

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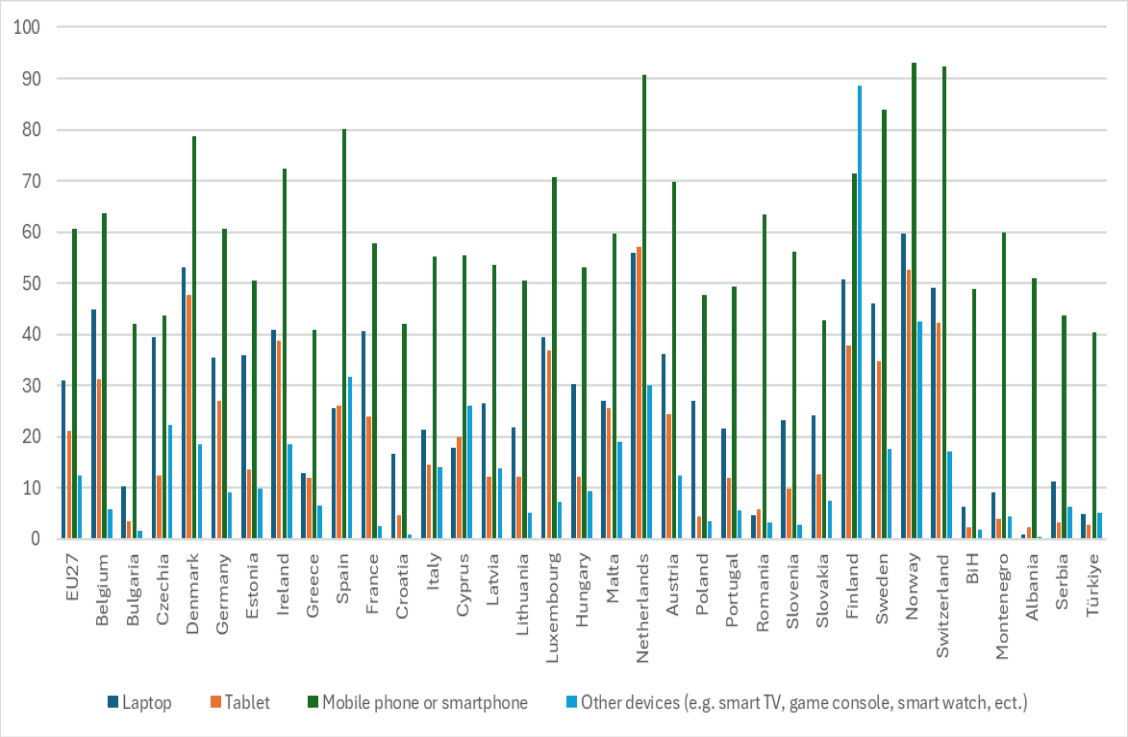
and Bulgaria (4.25%). The average for the 27 countries of the European Union is 80.79% for mobile devices or smartphones, 44.93% for laptops, 27.84% for tablets and 22.32% for other devices.

Exhibit 5. Types of devices and technologies that seniors (65 - 74 years old) most used in 2023 (as % of individuals used the internet)



Source: Eurostat and systematisation of authors

https://ec.europa.eu/eurostat/databrowser/view/isoc_ci_dev_i/default/table?lang=en

Exhibit 5 shows that members of the older population (65-74 years) use the internet via the above-mentioned tools in approximately the same percentages as members of the older population between 55 and 64 years in 2023. The only changes were in the category of mobile phones or smartphones and laptops, where Norway (92.99% and 59.72%) took first place from Switzerland and the Netherlands. The average for the 27 countries of the European Union is 60.50% for mobile phones or smartphones, 31.04% for laptops, 21.17% for tablets and 12.52% for other devices among seniors aged between 65 and 74.

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4. Policy Framework for Digital Inclusion and Senior Education

The example of Polish city of Wroclaw is one of the best examples of European cities that are actively involved in the inclusion of the elderly in social life. Their involvement is not necessarily limited to digital inclusion, but it is a logical complement to other activities. One of the most famous annual events in Wroclaw is the "march of hats", where older people parade through the streets of the city wearing specially designed masks on their heads. The whole gathering ends in front of the Town Hall, where the winners with the most imaginative masks on their heads are announced to the sounds of old classics by the Beatles, ABBA, etc. *"The point of the gathering is to challenge what behavior is considered appropriate for old age. "My grandmother was very strict and religious, and she dressed almost like a nun," says pensioner Ewa Rapacz, 80."*[1] Proof that Wroclaw is not limited to one event a year is the involvement of pensioners in lifelong learning processes and active participation in shaping the city's economic policy. Currently, there are 10 universities in Wroclaw that offer lifelong learning programs and thus improve the digital literacy of pensioners. In this way, an attempt is made to improve their digital participation, which they can later use in various areas of life. In addition, the "Council of the Elderly" was founded in Wroclaw in 2014 with the aim of involving pensioners in the social life of the city. At meetings with the city administration, members of the older generation present their proposals for improving social life in the city as well as the main challenges they face in the city. Proof that the "Council of the Elderly" is not just a formality is the possibility of using a "micro-car" and a "golden handyman". These programs allow pensioners to use a car to take them to the graves of their loved ones and a handyman to carry out certain repairs in their home. The example of Wroclaw clearly shows that digital inclusion is just one of the additions that can improve the overall social life of older people.

Another example of good practice is certainly the BOOMER (Booming digital literacy of elderly population) project funded by the European Union. The project, which involved eight partners from five different countries (Croatia, Italy, Germany, Belgium and Spain), aimed to improve the digital literacy of pensioners. As part of the project, workshops on digital literacy were held, which were attended by more than 600 participants in various project partner countries. The added value of the project can be seen in the further implementation of activities related to the

[1] https://www.theguardian.com/lifeandstyle/2024/sep/18/dont-fear-the-boomers-how-poland-is-celebrating-its-old-people-and-making-life-better-for-every-age

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digital literacy of pensioners, which did not end with the formal conclusion of the project on August 31, 2024. Likewise, the project provided completely free access to various modules (in 6 different languages) of workshops aimed at improving the digital literacy of pensioners, which can be used by various participants in economic and social life. Such examples are among the best examples of good practices to improve not only the social inclusion of pensioners but also their digital skills.[2]

[2] More details about project can be found at https://www.digital-boomer.eu/index.php?lang=EN (Accessed March 26th, 2025)

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5. Survival Digital Skills for Social Inclusion and Loneliness Prevention

In the context of increasing digitalisation, older adults are increasingly required to develop a set of digital skills that allow them to remain socially connected and independent. According to the article "The importance of acquiring digital skills in the elderly", published on the EPALE platform[3], the most essential skills for seniors include those related to digital communication, information access, daily transactions, health management, cognitive engagement, and civic participation. Firstly, the ability to use communication tools such as video conferencing platforms, messaging applications, and social media is crucial for maintaining contact with family and friends. This digital communication is not only practical, but also vital for psychological wellbeing, as it helps reduce feelings of loneliness and strengthens emotional ties. Secondly, acquiring the ability to search for and access reliable online information plays a central role in promoting autonomy. A further critical area is the use of digital platforms for essential transactions. The ability to shop online and manage personal banking enables older people to access goods and services without depending on others or needing to leave their home - something particularly beneficial for those with limited mobility.

In addition, the use of telehealth services and wellness apps allows seniors to consult medical professionals remotely, track their health, and engage in preventive activities. Digital competence also contributes to mental agility. Engaging with technology through educational content, games, or webinars offers cognitive stimulation that may support memory and reduce the risk of cognitive decline. Finally, digital tools enable participation in community life. Older adults can take part in online volunteering, contribute to discussions in digital forums, and even mentor younger generations. These essential digital skills align closely with the European Commission's Digital Competence Framework for Citizens (DigComp 2.2), which defines five core areas: information and data literacy, communication and collaboration, digital content creation, safety, and problem-solving. Each of the skills described above falls within one or more of these competence areas, demonstrating that the framework can be effectively applied to the needs of the ageing population.

[3] https://epale.ec.europa.eu/en/blog/importance-acquiring-digital-skills-elderly (Accessed on March 25th, 2025)

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The report from OECD (2024) provides a comprehensive analysis of seniors' engagement with digital services. The report highlights that while many EU countries have digitalized public services, seniors often face barriers such as limited digital literacy and lack of access to necessary technology, hindering their effective use of e-government platforms. Seniors may be hesitant to use online banking services due to concerns about security and fraud, as well as unfamiliarity with digital interfaces. This reluctance can lead to continued reliance on traditional banking methods. The adoption of digital health services among seniors is often low, attributed to factors like lack of awareness, difficulties in navigating complex platforms, and concerns about privacy and data security.

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6. Barriers and Gaps in Digital Literacy and Online Engagement

Regarding the barriers and gaps seniors preventing seniors from engaging in digital literacy and online engagement, a few can be mentioned. To start, many older adults lack the basic digital skills needed to use devices or access online services. In 2023, only 28% of people aged 65–74 in the EU had at least basic digital skills, compared to 70% of those aged 16–24.[4]

Next, digital platforms are often not designed with older users in mind. Complex layouts, small text, or unclear instructions make websites and apps difficult to use, discouraging senior engagement (OECD, 2024). A significant group of older adults across the European Union faces persistent psychological barriers that prevent them from engaging with digital technologies. Many seniors express a fear of using digital tools, concerned they might make irreversible mistakes, damage devices, or expose themselves to online fraud. This "technophobia" is often coupled with a lack of confidence.[5]

In addition to psychological challenges, economic constraints are a major barrier. Furthermore, even when infrastructure and devices are available, many older individuals still struggle to find digital training that is accessible, practical, and appropriate for their learning pace. Existing training programs often assume a baseline level of familiarity with technology or are designed with younger learners in mind (ASIDE, 2021).

[4] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Skills_for_the_digital_age (Accessed on March 25th, 2025)
[5] https://epale.ec.europa.eu/en/blog/digequal-analysis-e-government-access-european-adults (Accessed on March 25th, 2025)

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7. Challenges, Opportunities, and Skills Gap Assessment

According to Eurostat[6] report on digital skills, the most prominent challenge in digitalizing adult seniors lies in the fact that women and men across the EU have limited digital skills: "Lower *digital skills were recorded in older age groups among both men and women. For example, in the 65-74 age group, the percentage of men with at least basic digital skills more than halves compared with those aged 25-34 (69% compared with 34%). The contrast among women of different age groups was even more pronounced: 71% of women aged 25-34 possessed at least basic digital skills compared with only 25% of those aged 65-74".* It is also worth noting that senior adults often present specific challenges for adult educators and trainers. One of the primary obstacles is the slower pace at which many older learners absorb new information, particularly in digital environments. [7]This can lead to difficulties in keeping up with the fast-evolving landscape of technology.

The MADIS Handbook (2022) presents a comprehensive analysis of the challenges and best practices related to the digital inclusion of seniors across several EU countries. Based on survey results, the following critical success factors for digital training programs targeted at seniors have been identified:

a) Free access and removal of financial barriers - a recurring obstacle for seniors is the inability to afford course fees or digital equipment

b) Access to devices and physical accessibility - physical and organisational barriers were also common, including lack of devices and limited mobility

c) Short and flexible learning formats - to accommodate seniors' physical limitations and time constraints, programs avoid long or intense sessions

[6] https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240222-1 (Accessed on March 26th, 2025)
[7] Erasmus+ Programme: yes we can, Guide for senior educators with the adaption of freire methodology in the ICT learning, 2022 https://ec.europa.eu/programmes/erasmus-plus/project-result-content/52d1076a-4acf-4dd2-a658-e88c99ed4cfd/YWC-IO3-FINAL_VERSION.pdf (Accessed on March 26th, 2025)

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d) Personalised, small group or one-on-one learning - any seniors feel anxious about learning in large or unfamiliar groups

e) Monitoring and adaptation based on feedback - programs often incorporate participant feedback to adapt training formats and content

f) Community-Based Implementation and Intergenerational Support - trust and familiarity are crucial. Several programs collaborate with local senior centres, libraries, or intergenerational volunteers (e.g., students assisting seniors)

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8. Recommendations for Training and Upskilling Pathways

Given the growing proportion of older adults in society and the increasing digitalisation of everyday life, it is essential to develop sustainable and targeted training programmes that equip seniors with essential digital skills. Effective programmes should be based on a clear understanding of the barriers older adults face, such as lack of confidence, fear of scams, physical limitations, and limited access to appropriate technology and learning formats. Training content should be practical and connected to real-life situations, covering communication tools, managing personal finances, accessing services and using healthcare platforms. In addition to basic digital skills, it is important to include topics that promote independence, online safety, and mental stimulation. To ensure accessibility, training should be short, flexible, and delivered in small groups or individualized formats, using simple and clearly structured materials. Educational institutions, community organisations, volunteer networks and other local actors can play a key role in delivering these programmes. Their close connection to senior populations and existing trust can encourage higher participation and engagement. Collaboration between public bodies, civil society, and the private sector is essential to provide equipment, reduce costs, and tailor content. Special attention should be given to intergenerational learning, where younger individuals support seniors in acquiring digital skills. An effective upskilling pathway for older adults should include an adaptable learning pace, personalised instruction, relevant content, and ongoing encouragement. This approach not only enhances digital literacy but also fosters inclusion, autonomy, and a stronger sense of connection in an increasingly digital society.

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