GenerationInfinity

The Generation Infinity Project: Enhancing digital skills, competencies and safety in European older adults and seniors!

Work Package 2:

Country Case Study Booklet

BG GR IT PL SI

Project Partners

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A. COUNTRY CASE STUDY: BULGARIA

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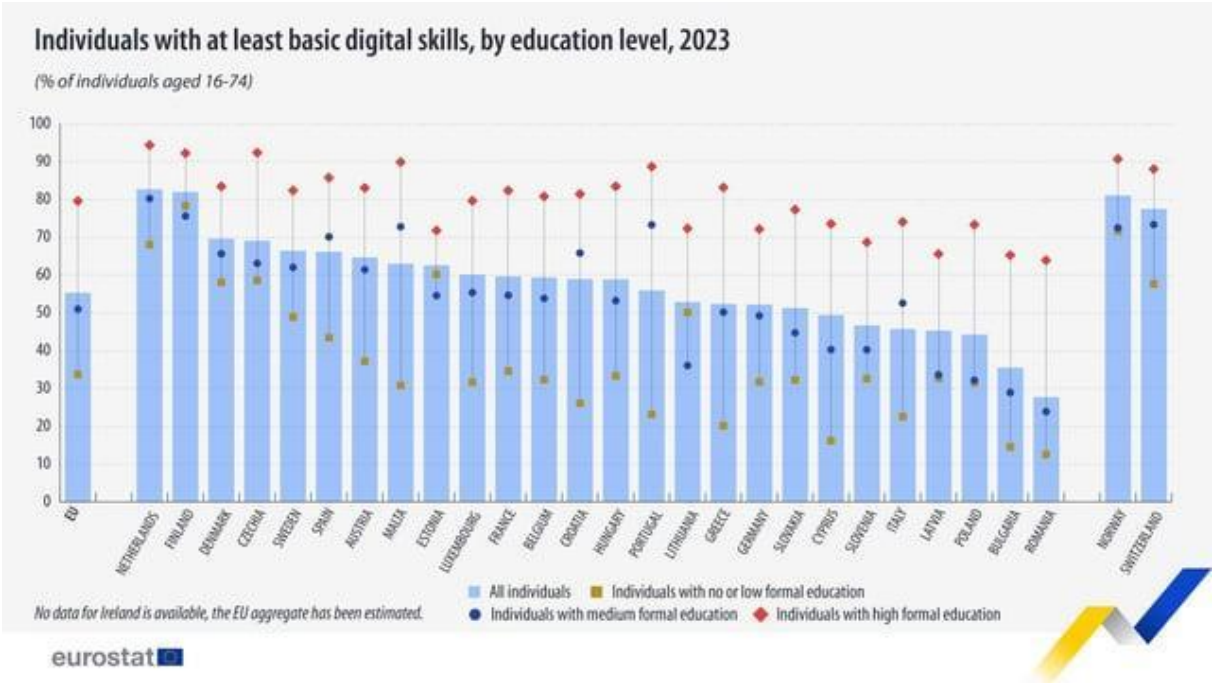
1. Current situation of seniors regarding digital readiness, digital safety and digital skills of seniors

According to the variety of surveys and national reports seniors in Bulgaria face significant digital exclusion: lack or limited access to equipment, low basic skills, and limited understanding of online safety.

In the 2024 edition of the Digital Decade report, Bulgaria has achieved 35.5% basic digital skills coverage, compared to the EU average of 55.6%. (2030 national target 52%). This puts Bulgaria at 44.4% of the overall target for the EU 2030. In 2023 Bulgaria ranks at the bottom of the EU in digital skills: only about 35–36% of the overall population (age 16 to 74) has at least basic digital skills—well below the EU average ~55%. Only Romania is behind Bulgaria.



Main report notice:

Living Areas: In rural areas the digital skills gap is wider, a mere 20.93% of residents have basic skills, starkly below the EU average of 47.50%. The rural- urban digital divide in Bulgaria is substantial, with a 14.59pp difference from the national average, which is much greater than the EU average gap of 8.06pp.

The elderly (65 to 74 years) are at the lowest end of the spectrum, with only 7.30% having basic digital skills, which is significantly lower than the EU average of 28.19% for the same age group.

Gender Gap: Interestingly, Bulgaria defies the common trend with 36.19% of females having basic digital skills compared to 34.83% of males, resulting in a negative gender gap of -1.36 percentage points. This is not only below the EU average gender gap of 2.23pp but also indicates an unusual situation where women are more digitally skilled than men.

A 2023 Cedefop report emphasizes a widening urban–rural gap and poorer skills among older age groups. 41% of them lack any device.

In Bulgaria, **less than 15%** of seniors aged 55–64 took part in any education/training in 2022—vastly lower than the EU average (~35%) op.europa.eu.

Overall adult learning in Bulgaria is low: just **9.5%** engaged in 2022, vs. 39.5% across the EU (https://op.europa.eu/webpub/eac/education-and-training-monitor/en/country-reports/bulgaria.html?utm_source=chatgpt.com)

The Bulgarian strategic document about digital transformation vision, policy and objectives is **The national strategic document "Digital Transformation of Bulgaria for the period 2020-2030".** It includes the National Program "Digital Bulgaria 2025", the priorities of the "National Development Program BULGARIA 2030", as well as a number of other national strategic documents with a technological component, covering the period up to 2030.

The Bulgarian strategic roadmap for the Digital Decade developed by the Council of Ministers of the Republic of Bulgaria sets out the strategic goals to be achieved by 2030, monitoring their achievement, and the target paths and key measures have been developed.

Key challenges to overcome in the strategic documents:

- Large gaps in digital skills and literacy and internet use among the population, especially in rural areas and among the elderly.
- Lack of awareness about online safety and cyber security.
- Shortage of skilled IT workforce at all management and business levels.\
- Lack of ICT training and skill enhancement in the organization sector, especially at the regional level.

National interventions planned:

The EU-funded National Recovery and Resilience Plan is tackling the challenges: its pilot phase equipped 1,188 seniors with tablets and trained them, aiming to reach 170,000 seniors by 2026, with a budget of ~€70 million allocated to the "Improving digital skills for seniors and distribution of Senior tablets" initiative. Seniors (65+) can apply for beginner and advanced training, comprising four modules: technology basics, internet search, online communication, and cybersecurity.

The Ministry of Labour and Social Policy is providing a tailored approach to address the specific needs and challenges identified for each vulnerable group on the Bulgarian job market, such as elderly people, people living in remote areas, and minorities in Bulgaria. For example, older people may need training in basic digital literacy, while people living in remote areas may require access to the necessary infrastructure.

Two outcomes of the Ministry's approach are:

- The Minister's approval in 2023 of the curricula for acquiring general digital competences for basic, intermediate, advanced, and highly specialised levels; and
- The adoption of a unified certificate for acquired basic, intermediate, advanced, or highly specialised levels of digital skills for adult learners. A forthcoming contribution planned by the Ministry of Labour and Social Policy is the setting up of 'Digital Clubs', planned for 2025, in locations throughout the country. The creation of these clubs is part of a project to develop a national virtual platform for online training financed with support from the EU as an investment under the national RRP. The 'Digital Clubs' will be equipped with broadband internet

access and modern computer equipment adapted to work with Bulgaria's virtual platform for e-training. Where necessary, the clients of these Clubs will be supported by mentors to ease up their access to the virtual platform and learning materials, and to facilitate their participation in the online training courses.

National recovery plans and EU initiatives are in place, but need greater focus on reaching seniors, especially in rural areas.

2. Main Challenges

The main challenges are identified in national and EU annual reports, the questionnaires and focus groups as well as the expertise of the partner.

- Lack or very limited digital skills among old adults and senior
- Lack of awareness about online safety and cyber security.
- Limited technological knowledge
- Lack of current national programs to deliver basic digital training for seniors, in particular in rural areas
- Limited permanent support to seniors to learn new technology and digitals and appropriate environment to learn
- High price of digital devices

3. Trainers' Findings

General Information

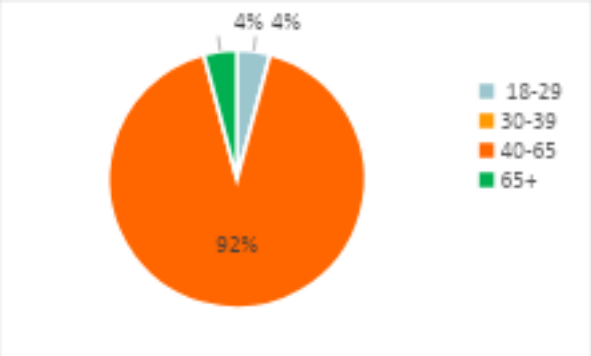
The experts of the Gotse Delchev municipality invited more than 30 educators to fill the questionnaire and share their experience and findings on Digital Trainings for adults and seniors. 24 respondents provided they answers.

Age and gender of the educators

The majority of respondents, more than 90%, are in the active age of 40 to 65 years. It reflexes the current situation in education in Bulgaria.

The age of the educators is as follows:

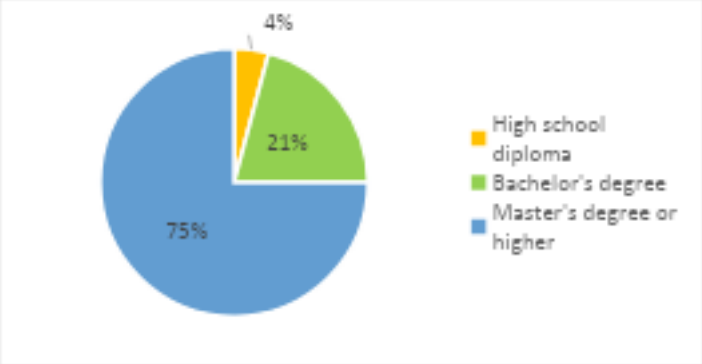
- 4.2 % of respondents are seniors 65+
- 91.1 % between 40 and 65-year-old
- 4.2 % are young people, 18-29 years



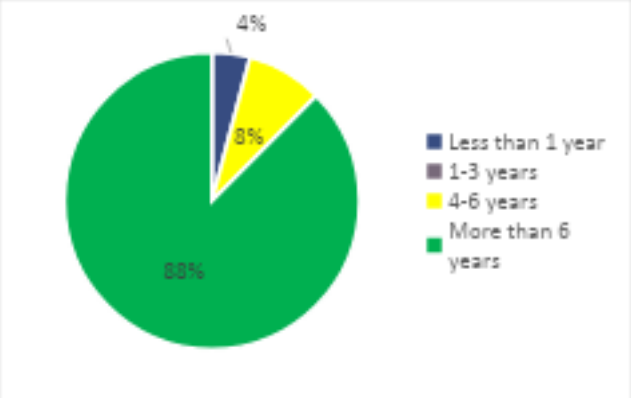
The female educators are 58.3% and male educators are 41.7 % of respondents.

Education background and experience of educators

The Trainers involved in the survey are well educated. 75 % of the respondents have Master degree of the university, 20.8% possess Bachelor degree and only 4.2 % have a high school diploma (only one of respondents)



The educators are experienced as 87.5% of them have more than 6 years in training adults and seniors. 8.3% have experience between 4-6 years and only one (4.2%) has less than one year. 95.8% have delivered digital trainings to older adults and only one participant in the survey (4.2%) have not.



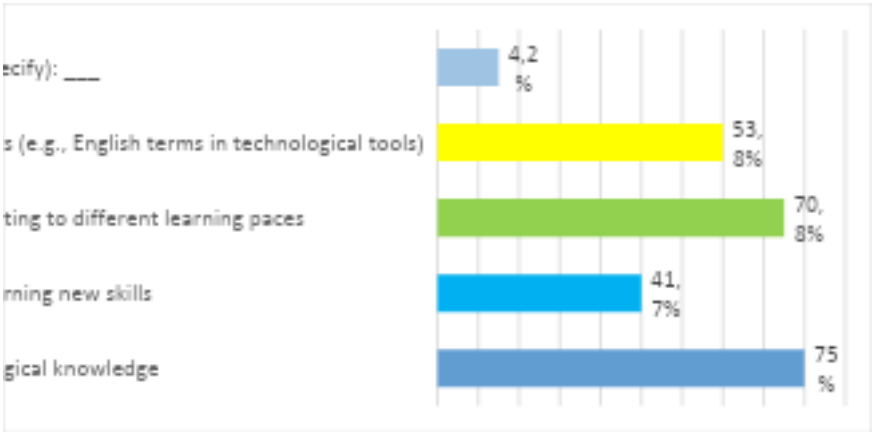
Trainers' Questionnaires & Focus Groups Findings

Findings through the questionnaires

In this section only main challenges and findings are shown. The full report on Questionnaires are applied in the annexes.

The main challenges pointed by the educators in their answers are as follows:

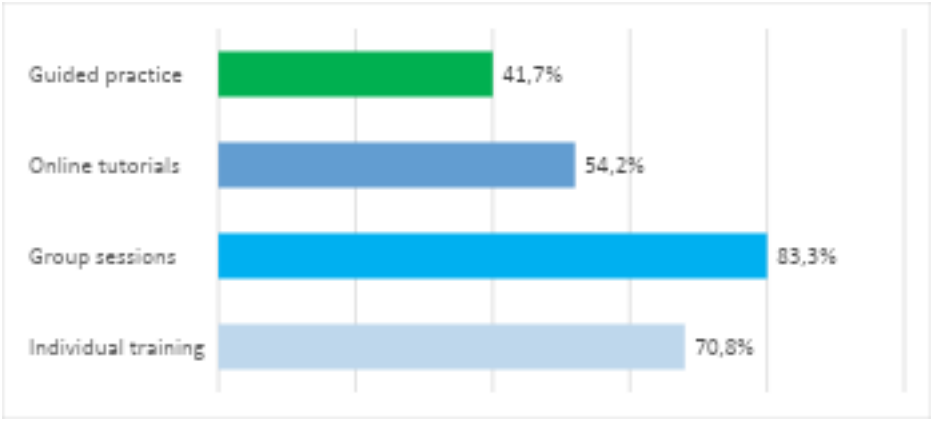
- Limited technological knowledge 75%
- Difficulty in adapting to different learning paces 70.8%
- Language barriers (e.g., English terms in technological tools) 53.8%
- Resistance to learning new skills - 41.7%
- Other –problem to remember 4.2% Ione response)



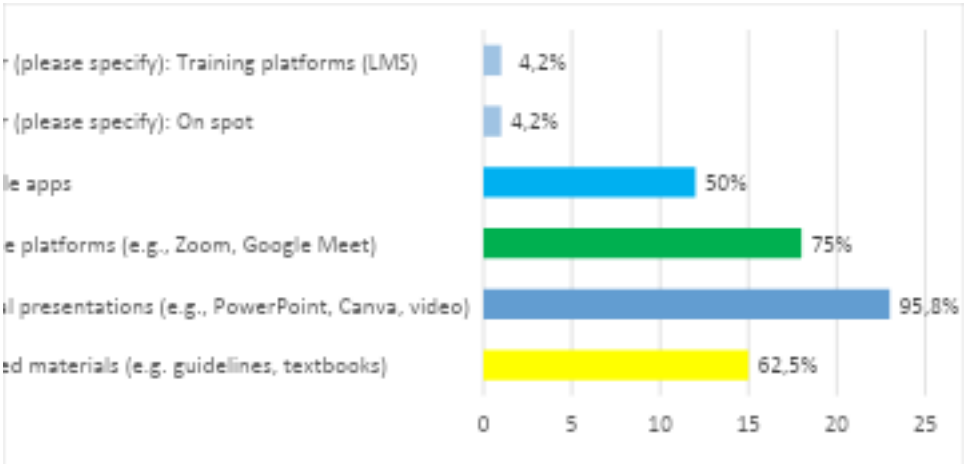
Text (example: regarding the question “What teaching methods do you currently use for digital skills training?” XX of trainers answered that they prefer “Group sessions” and provide the infographic from the Google Form)

Teaching methods, tools and format for digital skills training used by educators

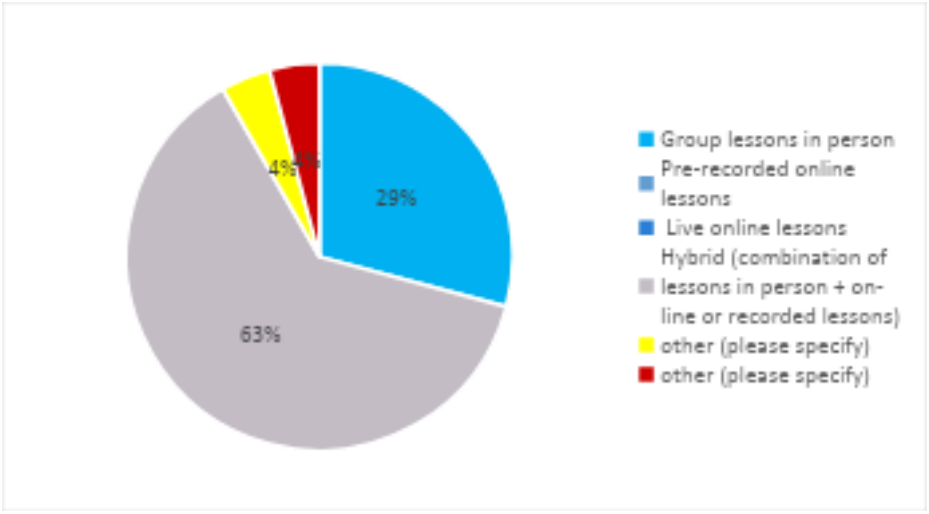
The respondent educators have had experience in all the **methods** as the group sessions are predominate with 83.3%, followed by individual training – 70.8%. on-line is also popular as 54.2% of educators have delivered it.



Concerning the resources and tools almost all the educators use **Digital presentations** (e.g., PowerPoint, Canva, video) – 95.8%. Online platforms (e.g., Zoom, Google Meet) are used by 75% of trainers. On the third place are Printed materials (e.g. guidelines, textbooks) with 62.5%, followed by mobile apps – 50%.



The responded educators pointed that the **Hybrid format** (combination of lessons in person + on-line or recorded lessons) is the most appropriate with 62.5% followed by Group lessons in person with 29.2%. Individual lessons are on the third place with 4.2%



Some valuable recommendations:

Prioritization of **needs, individual approach, simplified** terminology

To be **tailored to the goals and profile of the learners**, more **practical tasks**

Practical **examples from real life**

In case of an unsuccessful attempt to perform, **repeating the task** until it leads to a successful outcome.

The content should be presented in understandable way and be useful for the everyday life of older people. Emphasis on their security on the network.

Applying **a flexible format such as combining in-person classes with online resources** (videos, quizzes, forums) for greater flexibility.

Incorporating real tasks such as creating documents, online communication or working with data. Adults learn better by applying knowledge, as well as the possibility of **short lessons of 15–30 minutes for specific skills**.

Taking into account the **individuality of the learners** and **adapting t**he learning material to the group.

Findings by the Focus groups

The experts of the Gotse Delchev municipality organized and facilitated **3 Focus groups** each of them with 3 experienced educators/trainers. The total number of the participants is **9.**

The first Focus group consisted of 3 very experienced educators on digital skills with university degree. They are high school's teachers now and have had experience in delivering training to adults'/seniors' digital skills. The focus group was held on 9 May 2025 in Gotse Delchev.

The second Focus group consisted of 3 very experienced educators on digital skills with university degree. They are high school teachers and VET trainers and have had experience in delivering training to adults'/seniors' digital skills and technology. The focus group was held on 20 May 2025 in Gotse Delchev.

The third Focus group consisted of 3 very experienced educators on digital skills with university degree. They are high school teachers and a VET trainer and have had experience in delivering training to adults'/seniors' digital skills and technology. The focus group was held on 23 June 2025 in Gotse Delchev.

The main difficulties and challenges pointed by the educators are:

- **Limited or no** knowledge on digital skills
- **Protect personal data** and how to avoid **scam, fishing and frauds**.
- Believe **they are not capable to learn new** complicated things
- The **slow pace of learning, difficulty to remember**, their reflation is slow.
- The new technology is scaring for old adults. Seniors are afraid **they cannot tackle the technology and they will fail in digitals**
- The **fair** if they do something wrong, they will **damage the device**.
- Lost the ability to **concentrate** on new information and knowledge

Most effective strategies and methods applied by educators in their trainings:

- The **learning process is step by step and easy steps**. And to pay **attention to everybody**.
- We as trainers should consider that the senior's brain has lost some of the ability to learn fast so in 30 minutes they need a break.
- Usually **15 minute to new knowledge – theory, them 15 minutes to repeat with support by the trainer and then 15 minutes to practice themselves independently**.
- For basic training the group could go more or less in **equal pace** for the advanced it deepens on the needs.
- **The dialog supports learning**.
- The adults **write notes** about the steps which must follow
- **Learning by practical tasks**. Each step is explaining clearly by examples; visualization is a must. Enough time to practice the new knowledge and skills
- **Individual approach applied in- presence trainings**
- Learning **practical things** which **make seniors' life easier**
- Adults need **to write notes**. When they go home they open the notes to know how to proceed. They forget quickly and to repeat again they need their own notes.
- The training should be in **small groups**. **The trainer must be very patient. No rush**
- **Playing games** in training to learn easily and make confident. The game is with clear instructions and step-by-step to click and learn without any pressure

Resources:

- The digital training for seniors need time, attitude, respect and encouragement. I use variety of resource available in Internet however I try to connect knowledge with seniors' life experience.
- Any resources available, including exchange of experience among educators.
- The best resource is the availability of the trainer to answer the adults' questions immediately
- Public resources such as banks, tax offices, social security institutions, ready programmes

Summary of the questionnaires and focus groups of educators

The main difficulties and challenges:

- Limited or lack of technological knowledge and skills
- Difficulty in adapting to different learning paces
- Language barriers (e.g., English terms in technological tools) 53.8%
- Fair and Resistance to learning new skills
- Fair of fail and damage the device
- Limited concentration to learn new things and difficult to remember
- Cybersecurity
- Only on-line training is not effective for seniors, in particular when they have no digital experience.

Effective Teaching methods and strategies:

Resources used

All the educators use Digital presentations (e.g., PowerPoint, Canva, video) – 95.8%. Online platforms (e.g., Zoom, Google Meet) are used by 75% of trainers. On the third place are Printed materials (e.g. guidelines, textbooks) with 62.5%, followed by mobile apps – 50%.

The **learning process is step by step and easy steps**. And individual approach and to pay **attention to everybody**.

Usually **15 minute to new knowledge – theory, them 15 minutes to repeat with support by the trainer and then 15 minutes to practice themselves independently**.

Playing games in training to learn easily and make them confident.

The dialog supports learning.

The adults **write notes** about the steps which must follow at home

- **Learning by practical tasks**.
- The training should be in **small groups**. **The trainer must be very patient. No rush**

Recommendations:

The optimum for the training is 2 hours per day, twice or three times a week as they should be room for human communication to make them relax to learn.

The duration of the training is better to be 8 weeks /2 months for advanced and about 4 weeks for basic.

The good trainer is crucial for the learning process.

4. Seniors' Findings

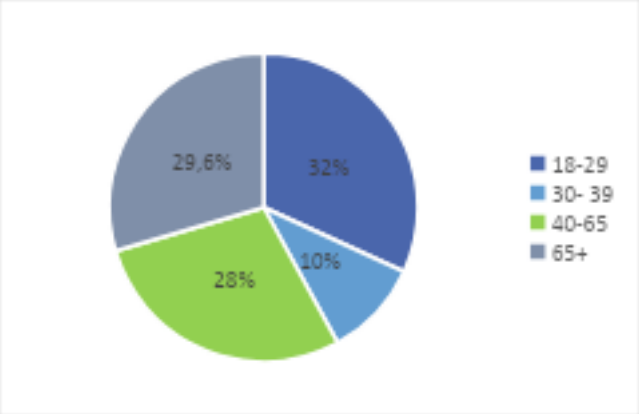
General Information

The experts of Gotse Delchev municipality sent the questionnaire on Digital Skills and Technology Use to more than 100 representatives and try to keep the balance between all the age groups. 88 respondents provided they answers.

Majority of respondents are adults and seniors. According to their age the answers split as follows:

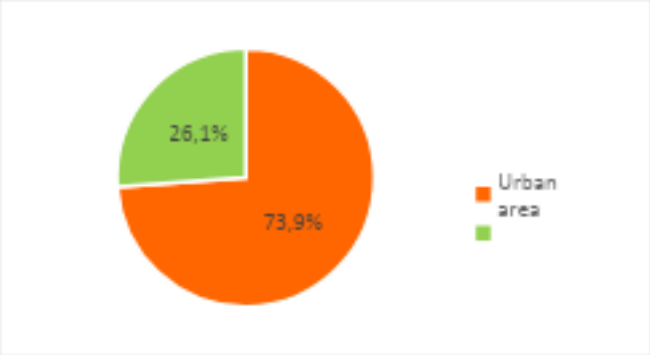
- 29.6% of respondent are seniors 65+
- 28.4% between 40 and 55-year-old

- 31.8 % are young people, 18-29 years
- 10.2 % between 30 and 39-year-old



Women took more active participation in questionnaire as **69.3% of respondents are female**. Men have almost one third representation with 30.7%.

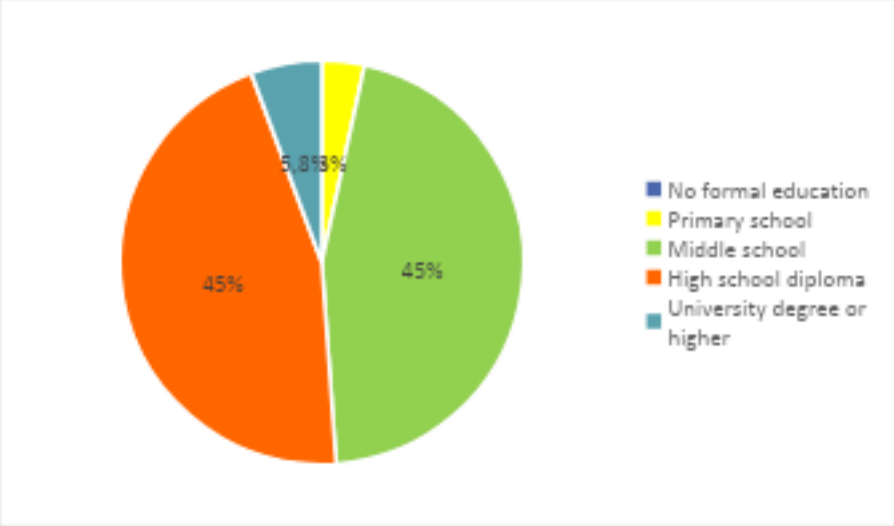
As according to the national and EU reports the senior digital skills in rural areas are very low, to have the idea about the current digital skills the experts sent the questionnaire to rural areas as well and received the answers from these areas a slightly over **one forth 26.1% answers while the respondents of the urban area are 73.9%**



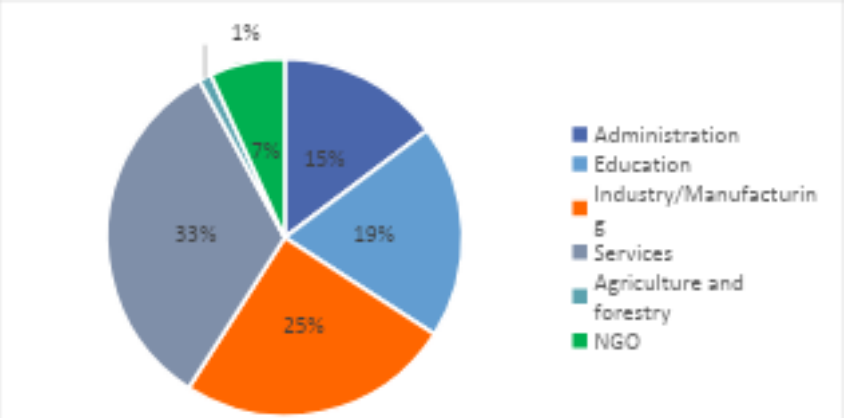
More than 90% of the respondent have **university or high school degrees** while only 9% are with just middle or primary school education.

- University degree or higher 45.5%
- High school diploma 45.5%

- Primary school - 3.4%
- Middle school - 5.8%



Concerning previous occupation, one third of the respondents used to work in Services providing, 25 % of the respondents in industry, 19.3% in Education, 14.8% in Administration , in NGO - 6,8% and Agriculture and forestry 1.1%.



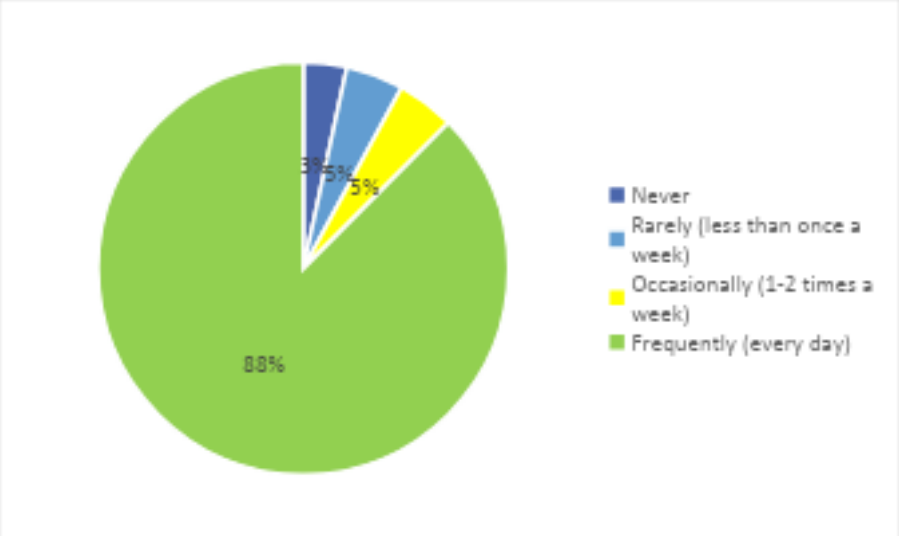
89.8% of the respondents have their own smartphones and 64.8% have computer or laptop. Tablet have 19.3% and only 4.5% do not have any devices.

Seniors' Questionnaires & Focus Groups Findings

Access to Internet at home have 88.8% of the respondents while 10.2% do not have such access at home.

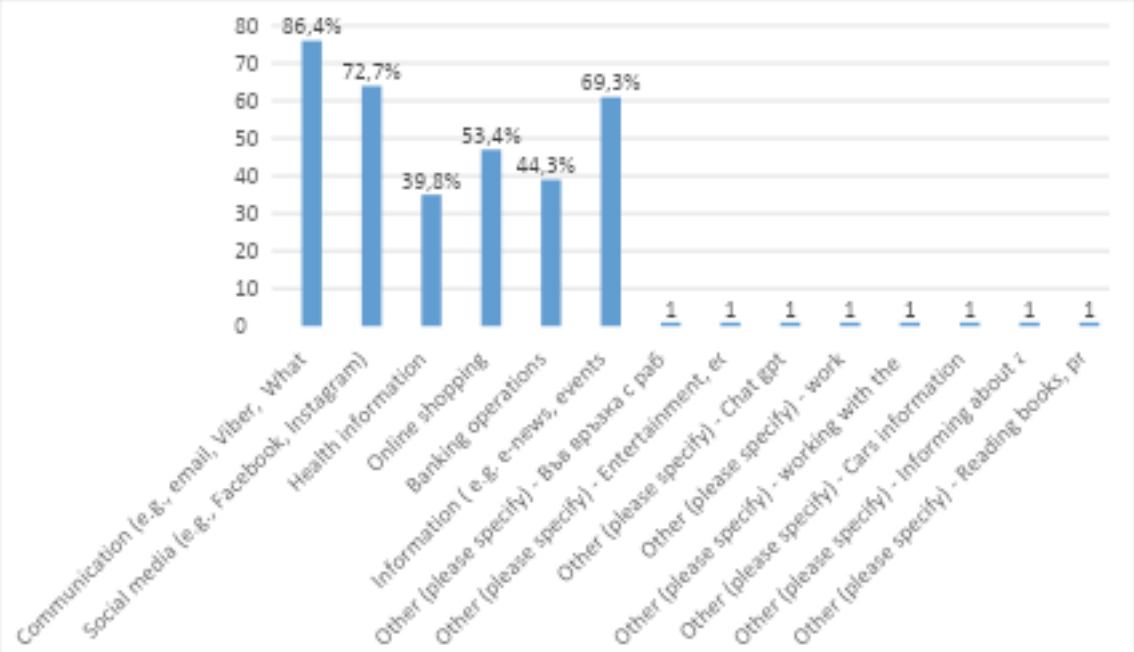
87.5% of the respondent use Internet every day, Occasionally (1-2 times a week) – 4.5%

Rarely (less than once a week) - 4.5% and never – 3.4% of the respondents



42% of the respondents use Internet more than 4 hours per day. 1-2 hour usage was reported by 29.5% of the answers, 3-4 hours use 17% of the respondents and 11,4% use less than one hour.

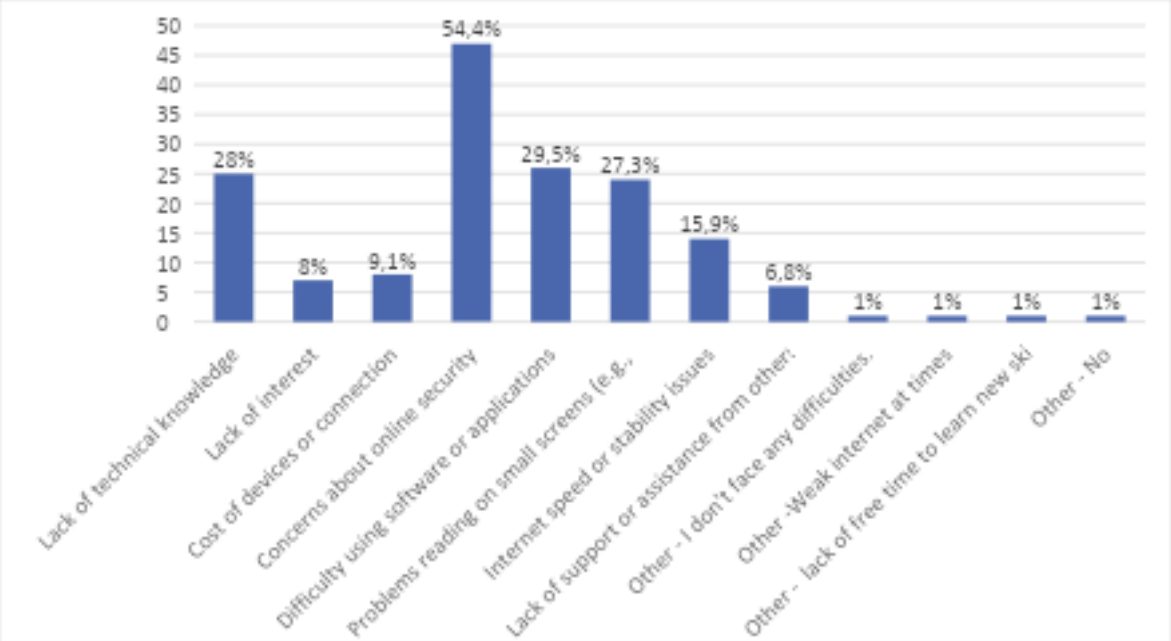
The respondents use Internet for the Communication (e.g., email, Viber, WhatsUp) 86.4%; Social media (e.g., Facebook, Instagram) - 72.7% and Information (e.g. e-news, events) 69.3%, Online shopping 53.4%,Banking operations 44.3%, Health information 39.8%



The main difficulties pointed by the respondents are concern about the **security**, usage of **apps and software and lack of technical knowledge**.

The answers split as follows:

- Concerns about online security - 51.4%
- Difficulty using software or applications - 29.5%
- Lack of technical knowledge 28% of the respondents
- Problems reading on small screens (e.g., smartphones) - 27.3%
- Internet speed or stability issues 15.9%
- Cost of devices or connection/ Access to Internet 9.1%
- Lack of interest 8%
- Lack of support or assistance from others 6.8%



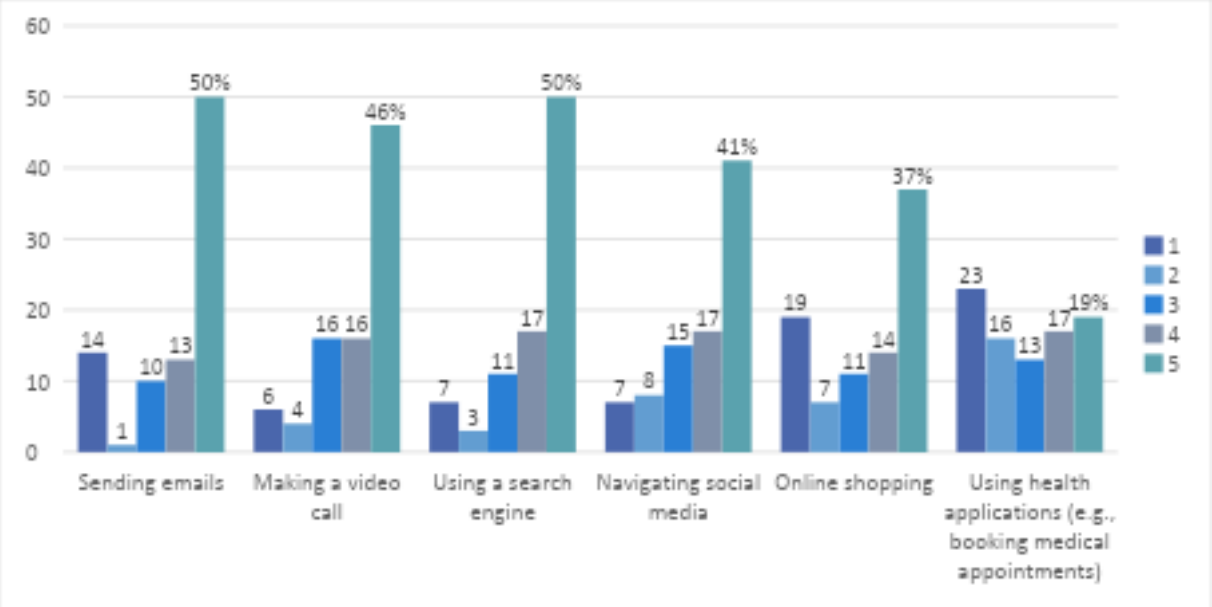
The respondents feel themselves more competent in the following activities:

Sending e-mails and **Using a search engine** - 50% of the respondents

Making a video call 46%

Social media 41%

The less competent the respondents feel in health app usage. Only 19% feel confident in their competence and 23% are not competent at all and Slightly competent are 17 %.



Concerning difficulties with technology 33% of the respondents do not have any difficulty to set up a new devise. However, 21% said they have many difficulties to do that. And together with “some difficulty” and middle position the percentage is 45 %.

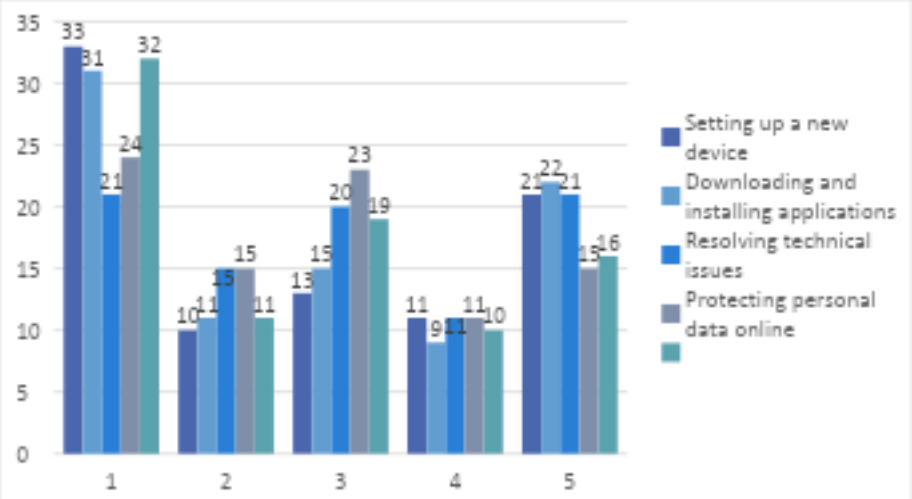
Applications are problematic for adults and seniors. Less than one third of respondents do not have difficulties -31%. Usually they are young people. Many difficulties answer was selected by 22% of the respondents and if we count some difficulty and middle position the percentage increases to 46 %

To resolve technical issues 21% of the respondents, face no difficulty. The same percentage 21% have many difficulties and here there are 52% of the respondents (many, some difficulties and middle) who have problem to tackle the technical issues.

Protecting personal data online has serious concerns by the respondents. 24% have no difficulties however the percentage of many difficulties, some difficulties and middle is 49%.

Only 16% of the respondents said they have many difficulties with remembering their password. And 32% do not have any difficulties. However, many + some difficulties + middle position counts 45%.

To summaries the main difficulties are “Resolving technical issues” with 52%; “Protecting personal data online” with 49% and “Downloading and installing applications” 46%. But the other reasons are very close with 45%



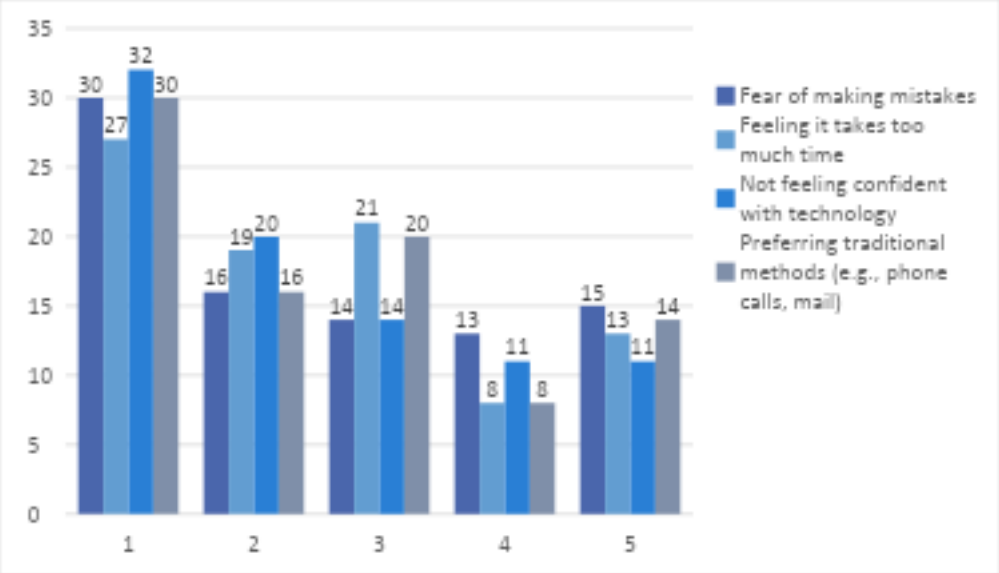
The reasons seniors avoid technologies are “Fear of not making mistakes” is the main reason to avoid using technologies. It is pointed by 28% of respondents (often and very often avoiding). The other reasons take 22%. If we count the middle position, then the percentage is as follows:

“Fear of not making mistakes” - 42%

“Preferring traditional methods (e.g., phone calls, mail) -”42%

“Feeling it takes too much time”- 42%

“Not feeling confident with technology” - 36%



Almost 60% of the respondents receive support occasionally (%9.1% of the respondents), followed by “No, never” with 27.3%. On regular support rely 12.5 % of the respondents.

Friends are the most supportive group as 48.9%, almost of the answers, selected it. Family members take the second place with 38.6% while support by professionals or experts receive 33%. Quite big percentage 20.5 do not have any support.

The preferable format of the training is **the group lessons in person. 37.5% confirmed it**. Next is **hybrid format for 28.4%** and the less preferable is on-line training. Only 14.8% of respondents prefer it.

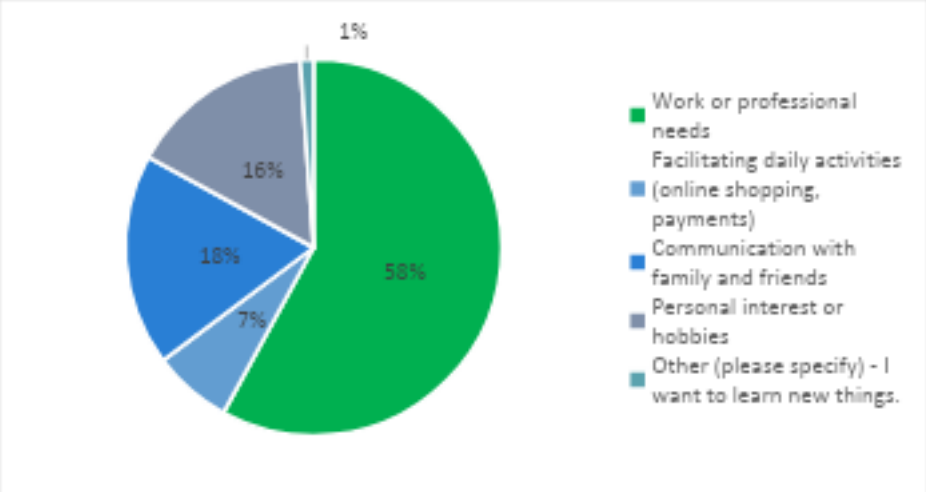
Close to the half of the answers 43.2% of the respondents pointed that the digital skills are very important. The other 43.2 % think they are moderate important. Slightly important is for 8% and only 5.6% pointed they are not important at all.

The majority of the respondents 63.6% pointed they prefer 1-2-hour training per week.

- 3-5 hours per week 15.9%
- Less than 1 hour per week – 15.9%
- More than 5 hours per week only 4,6% prefer longer training

58% of the respondents pointed “Work or professional needs” as the main motivation for digital skills improvement. Communication with family and friends follows with 18.2% then is “personal interest and hobby” with 15.9%.

Facilitating daily activities (online shopping, payments) – 6.8%



Focus Groups Seniors findings

The first Adult/senior Focus group was in Gotse Delchev on 27 March 2025. 4 people participated: 3 females and one male. Seniors 65+, average age 67.5, higher educational level, pensioners, active, some of them continue to deliver services part time, using daily digital devices. They use PC and smartphone, some of them tablets. FB is preferable social media and communication is with Viber, Messenger, Video calls.

The second Adult/senior Focus group was in Gotse Delchev on 28 March 2025. 4 female participants, the average age was 67. Seniors 65+, pensioners, education - secondary school, some of them active in work yet part time, they use daily at least one digital device. Communication is with Viber, Messenger to contact relatives abroad and friends, FB –social media.

The third Adult/senior Focus group was in the village of Banichan, Gotse Delchev municipality on 14 April 2025. 4 female participants, the average age was 72. Seniors 65+, pensioners, active, some of them with lower education, they use daily digital devices only phone for communication. In the rural area the skills are very low. The fair of digitals is high, some of them think they are too

old to deal with new technologies. However, even old people use technology when there is a strong support.

The forth Adult/senior Focus group was Gotse Delchev on 16 April 2025. 5 female participants, the average age was 71. Seniors 65+, pensioners, active, all of them with smartphones and they use daily digital devices. One of them do e-payment and on-line shopping but yet does feel quite confident. All of them communicate actively by e-devices and use social media a lot not only Facebook but also WhatsUp, Tik Tok. Capable of making video, sharing information.

The supports are mainly by children and friends. All the participants have positive attitude to the digitals despite some negative experience.

Main difficulties and concerns:

- English terminology, some computer programmes such as Excel
- Technical aspects of using software, e.g. actualizations of bank software and difficulty to get the logic of some new apps/platforms, e.g. Canva for graphic design
- Not make by mistake a registration or subscription when surfing, or using some Internet service
- Registration with face recognition and additional security for health status app
- Fear to not do something wrong, when using new technologies and PC programmes
- online shopping through a site with not good reputation
- on-line banking
- Fair to use digitals
- Health problems – difficult to see on small screen and to write, to remember what to do and how, lack of concentration.
- Registrations in apps
- Hacked profiles of social media and stolen personal data
- High price of devices

The easiest activity:

- Searching for information in Internet
- Simple communication

- surfing and communication
- video and music playing, news reading
- social media

The most challenging activity:

- better knowledge of digital security (e.g. to recognize if a site is secure or e-shop is credible)
- Canva and e-design
- the steps to buy online securely, incl. to know better my rights as a customer
- e-banking and e-shopping

Improvement of skills:

- apps for planning and organizing activities ,
- Excel for specific mathematical functions to help for tutoring students
- simple video recording and to share it with family
- Cybersecurity
- edit and post texts, images, video in Facebook; to find music and videos;
- some basic security and safety skills; to learn some basic e-banking, e.g. to pay regular bills,
- to book a medical appointment;
- to take notes, or reminding for tasks, or medicine taking, etc.
- corrections and saving the texts
- to process videos;
- how to identify false news and scam web-sites, how to recognize reliable sites and use web-site safely.

Previous experience and Preferable format:

Some of the participants have had previous experience in digital trainings.

They prefer in presence trainings in small groups and do not think only on-line training could improve their skills. “When someone works individually with me, I will be more concentrated and

could ask for exactly what I need. I think live training is better - trainees could ask questions, and trainer will see if everything is clear for them”

Training in a group to feel more secure, to learn from the experience of the others as well - e.g. when watching what works for them, or not.

Summary of findings

When seniors are educated and familiar with some digital technology they would like to learn something new and are ready to joying a training. For the others the training should be basic.

Usually seniors use simple digital functions such as Facebook and Internet surfing for news, recipe, simple communication

Seniors close to age of 65 are ready to learn and improve their digital skills, the older they are the more reluctant they are.

Seniors with children abroad have some basic digital skills however they do not feel confident to do e-payment, e-shopping etc. without presence of skillful relatives or friends to confirm they do the right things

Although they all agree that new functions of smartphone are useful and could make their life easier, they are not sure they could learn how to do it

Nevertheless, it's important for seniors to have opportunities for learning some things and for interesting and daily tasks

Main difficulties:

- Fear of not making mistakes
- Seniors cannot tackle with new apps without support
- E-banking and e-shopping
- Cybersecurity
- risk of scam and fishing
- Lack of digital devices or limited access to Internet for many seniors in villages, in particular 70+

Priority Needs

- Practical training
- Practical training on apps' installing and work
- Digital Security
- Protection of personal data
- communication in social media, copy, past, saving, video making, alarm setting, taking notes.

Conclusions and recommendations

It's good to have training in small groups in order to get enough attention from the trainer and to have opportunity to discuss with the other trainees. That's way the trainees motive and inspire each other to learn faster, easier and more effective

It's good to be face-to-face present if possible. If it's not possible - hybrid is another option.

The training should be very practical, with slower pace, clear and easy to understand with easy pace of learning

In the villages seniors have more limited digital skills than those in the towns and cities. They usually face lack of support and afraid more to learn new things. Although they all agree that functions as setting alarm for medicines or making video calls with children and relatives living abroad are very useful for them, they are not sure they could learn how to do it

Seniors are more reserved in using digital technologies, due to fears of new, forgetting, not always their children are nearby to help, they don't have computer and resources for buying

Nevertheless, it's important for seniors to have opportunities for learning some things and for interesting and daily tasks. More efforts and patience by the trainings will need. The training for seniors in the villages should be with calm pace and a lot of repeat and in a very supportive environment

Suggestions for Interventions

- Some physical training with appropriate pace
- Easy and clear instruction and personal support
- Easy instructions for the digital security in surfing, banking,
- Personal data protection
- On-line shopping instructions
- Promotion of useful digital services
- On-line security should be a key issue in the training
- Face-to-face basic training in a very supportive environment, a lot of clear and useful examples for the trainings in rural areas.
- For some active and motivated seniors an advanced training could be organized: e-services, e-government

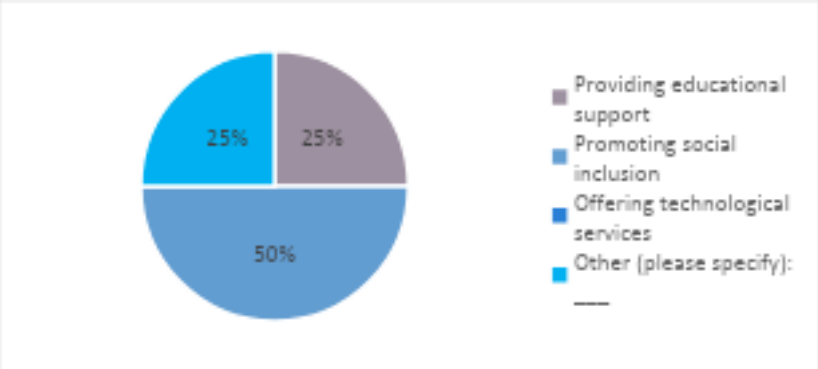
5. Organisations' Findings

General Information

4 organization working with adults and senior answered the questionnaire

The objective of the participated organizations is as follows:

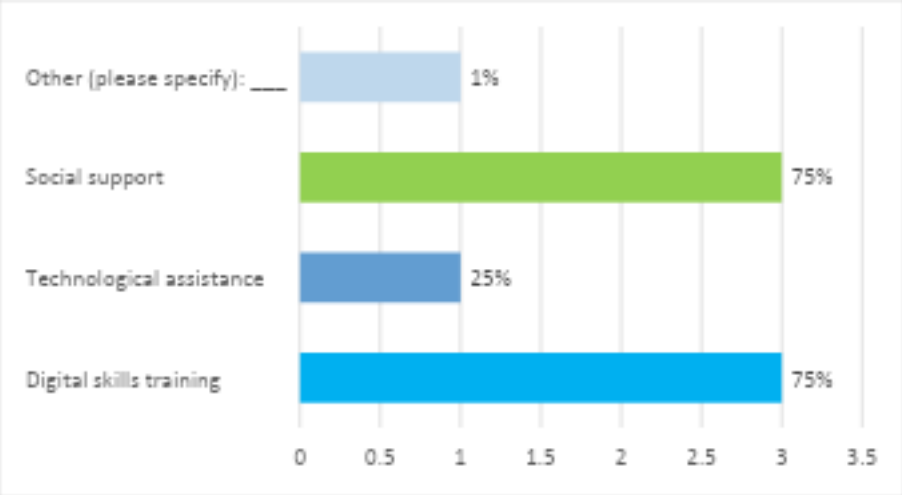
- Promoting social inclusion – 50%
- Providing educational support 25%
- Offering social service services 25%



The services delivered to the adults and seniors are

- Digital skills training – 75%

- Social support – 75%
- Technological assistance 25%



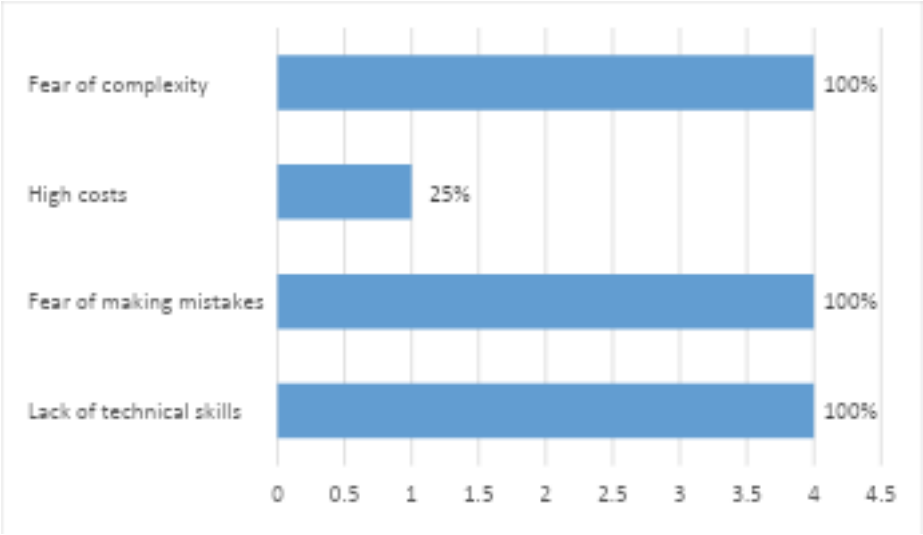
Concerning the number of the adults assisted by the organizations the answers split equally with 25 %.

- Fewer than 50 – 25%
- 50-100 – 25%
- 101-500 – 25%
- More than 500 – 25%

Finding from the Questionnaire for Organizations Working with Adults and Seniors

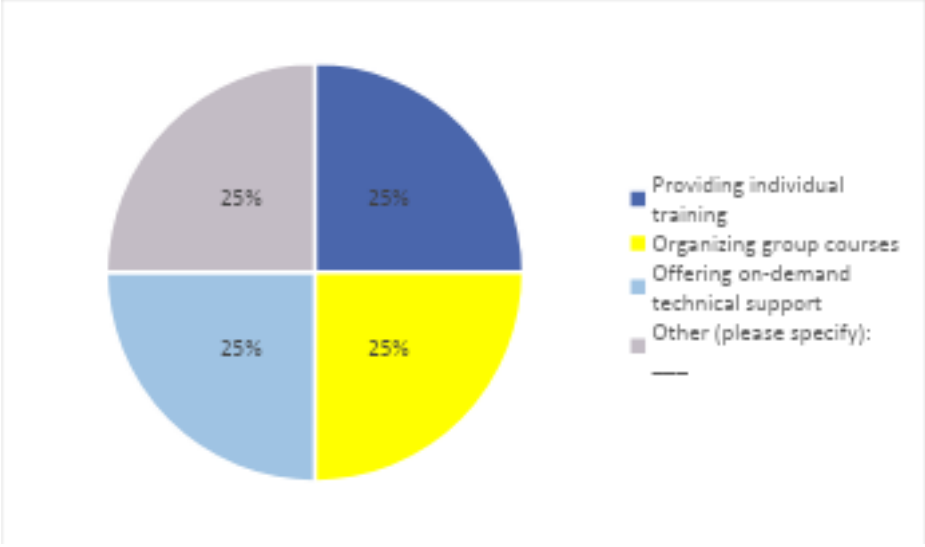
The main challenges seniors report when using technology are :

- Lack of technical skills – 100%
- Fear of making mistakes – 100%
- High costs - 25%
- Fear of complexity - 100%



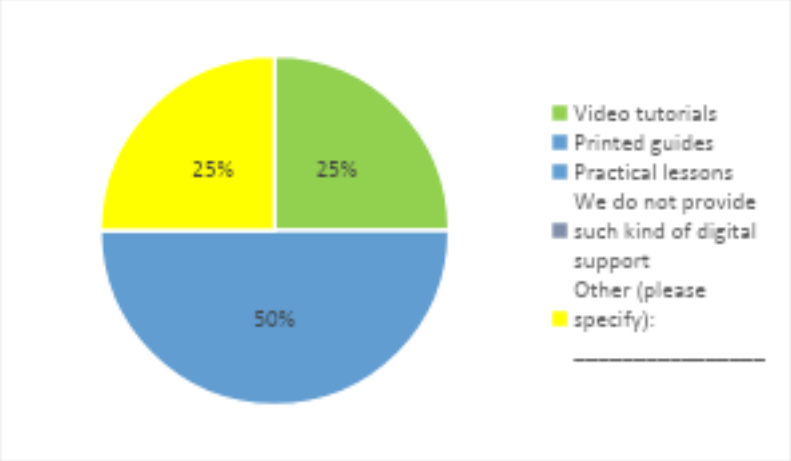
The organizations address these challenges through

- Providing individual training 25%
- Organizing group courses -25%
- Offering on-demand technical support 25%
- Other (please specify): all the above mentioned - 25%

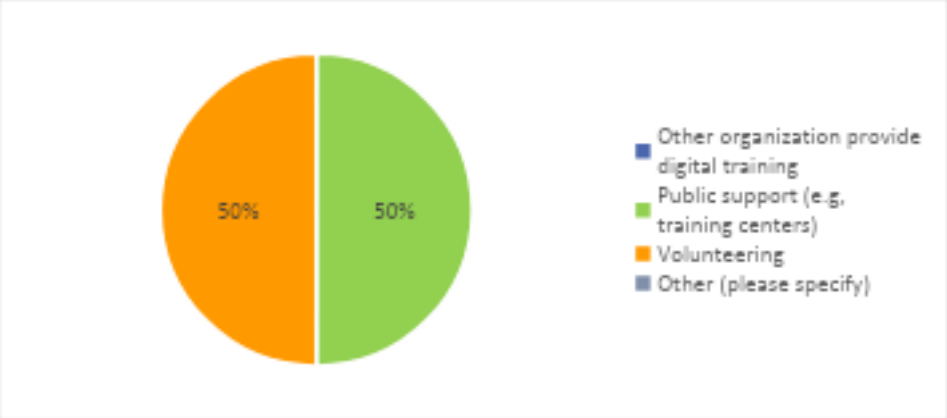


Resources used to support seniors in learning digital skills The useful resources are

- Practical lessons with 50%
- Video tutorials – 25%
- all mentioned: practical lessons, video and Printed guides -25 %



The collaborate with other organizations or entities to improve your services is in public support (e.g, training centers) with 50% and Volunteering other 50%.



Definitely there are gaps in the available resources – 100 % yes.

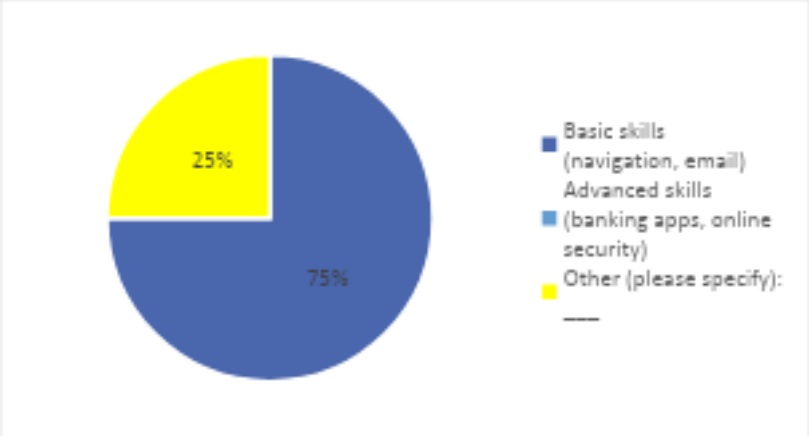
The gaps in the answers:

- Use of difficult terminology
- Lack of specialists who have an attitude to work with elderly people with disabilities, accessible educational programs in "easy-to-read" format,
- Limited financial resources, human resources and technical equipment
- Psychological advice

Main training needs observed by organizations

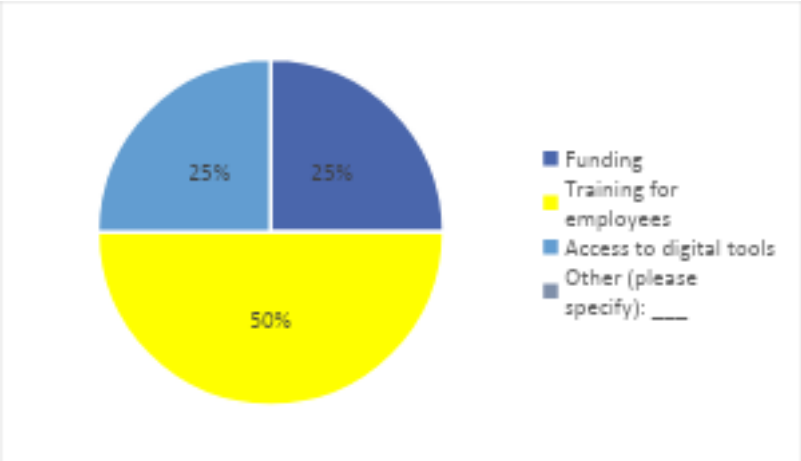
The organizations are sure that the needs are for Basic skills (navigation, email) – 75%

25% think that adults and seniors they work with need basic and after that advanced skills



Type of support to enhance organization's work with seniors

The training for employees is important according to 50% of organizations. Then is Funding with 25% and Access to digital tools – 25%



100 % of the participating organizations think the technology is moderately important for improving the quality of live for seniors.

All of the responding organizations are interested in collaborating on training programs specifically for seniors

Summary of findings

Suggestions of the participating organizations

- To provide training for seniors who do not work actively
- There is a lack of resources for subscription and use of software products free of charge
- To organize appropriate formats for training of elderly people in places where they gather together
- Training for adults should be tailored to the slower pace of learning, many exercises and time for communication. They prefer small groups in person

Changes or improvements to make digital services more accessible to seniors

- More technological service
- More donor programs for training and offering remote social services.
- Investing in the creation of so-called "internet clubs" that will be accessible spaces for social contacts for the elderly

- Affordable prices for devices and the internet, free personalized courses

Some Recommendations

- **Expand equipment access**: scale up tablet/laptop distribution beyond the €70 m NRRP pilot.
- **Intensify outreach in rural areas**: mobile training units, region-focused campaigns.
- **Sustain local training networks**: invest in libraries and clubs, adult educators, and Digital Ambassadors.
- **Integrate digital safety in mainstream services**: e-health, banking, public administration.
- **Track impact**: measure improvements among seniors (devices owned, skills, confidence).

6. References & Annexes

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digital-skills-jobs.europa.eu

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Annexes

1. Questionnaires & Focus Groups reports (google drive link)

B. COUNTRY CASE STUDY: GREECE

Authors: Bluechain Research Cooperative, Kavala, Greece

Greece research findings

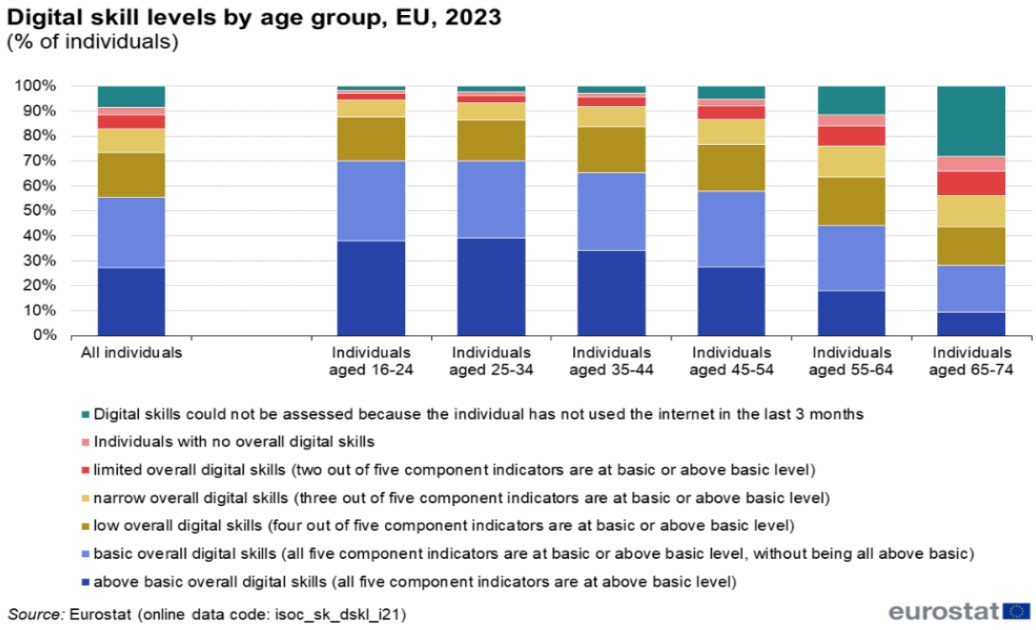
1. Current situation of seniors regarding digital readiness, digital safety and digital skills of seniors

Overview of Seniors' Digital Literacy in Greece

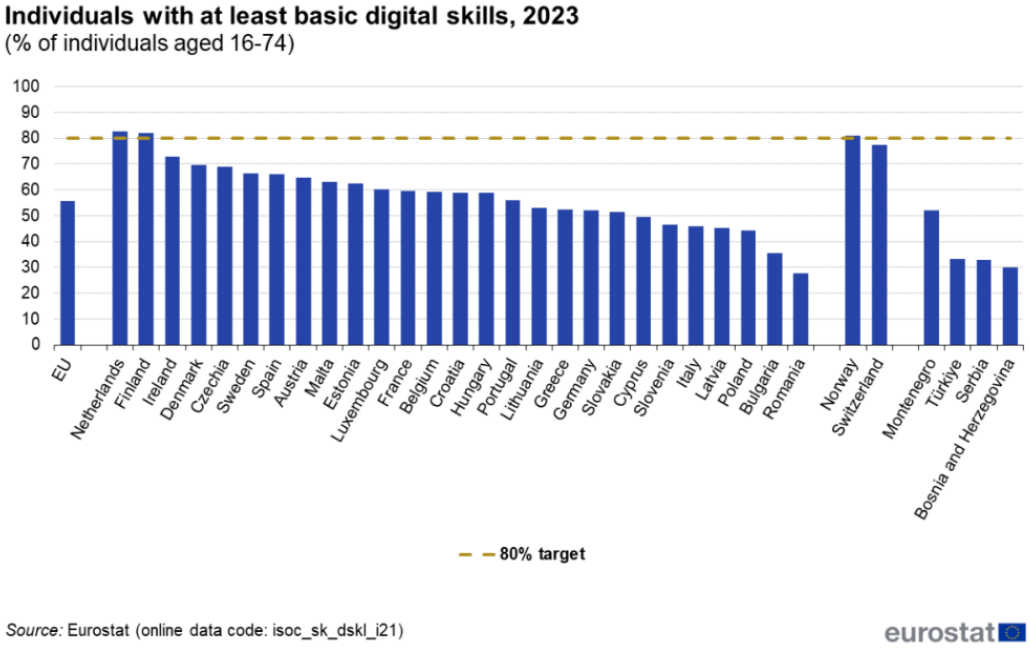
Despite significant recent investment and reforms, Greece still faces notable challenges in digital readiness among its population, particularly seniors. According to the **Digital Decade Report 2024** for Greece, only **52.4%** of the Greek population (aged 16–74) had at least basic digital skills in 2023, below the EU average of **55.6%** and unchanged since 2021.[1] Seniors, especially those over 65, are disproportionately affected. According to Eurostat

[1] Greece: a snapshot of digital skills

(2023), only 28% of EU citizens aged 65–74 had basic digital skills, while Greece stands below the EU average.[2]



[2] Skills for the digital age - Statistics Explained - Eurostat

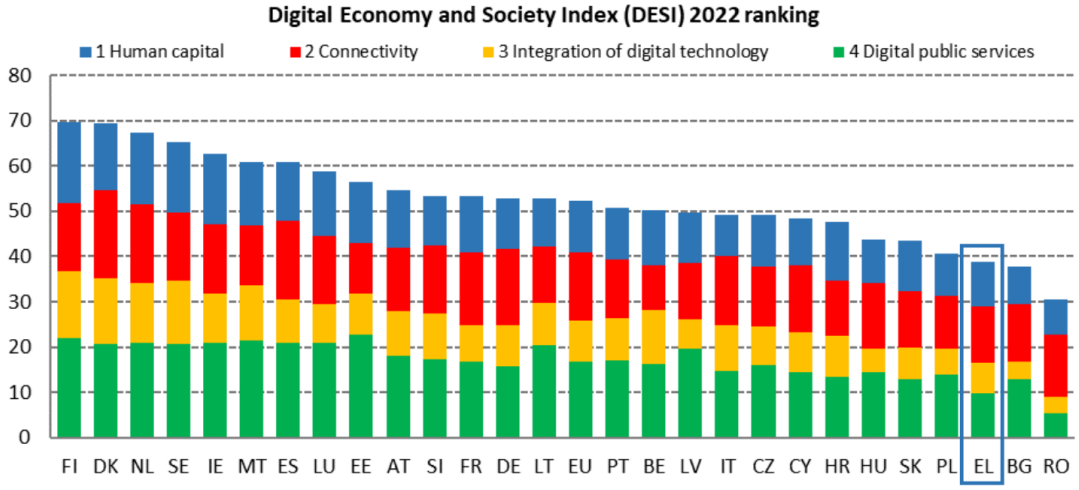


Source: Eurostat (online data code: isoc_sk_dskl_i21)

eurostat

The pandemic highlighted the digital exclusion of older adults, leading to more targeted efforts to bridge the gap. New services like **e-prescriptions, telehealth**, and the **gov.gr portal** have encouraged digital engagement among seniors. However, uptake remains limited: only an estimated **15%** of seniors use eGovernment services, and over **40%** of senior households are believed to lack broadband access. This gap is reflected in the **2024 DESI Report,** which ranks Greece 23rd out of 27 EU countries in digital skills under the Human Capital

dimension.[3]



Institutional Framework & Public Policy

While Greece does not have a dedicated national policy solely for senior digital education, older adults are increasingly included in broader national digital transformation efforts and EU-aligned strategies, which collectively aim to promote digital inclusion across all age groups, including seniors (*Digital Transformation Bible 2020–2025, the National Roadmap for the Digital Decade,* and the *National Coalition for Digital Skills and Jobs*).

Moreover, several initiatives have further enhanced outreach to older populations recently, particularly through local hubs, community centers, and digital trainers.

1. **Digital Transformation Bible 2020–2025**[4]
   Greece's national digital strategy, known as the **Digital Transformation Bible** (Βίβλος Ψηφιακού Μετασχηματισμού), outlines comprehensive actions to improve digital literacy across all demographic groups, including seniors. It emphasises lifelong

[3] Greece in the Digital Economy and Society Index

[4] Digital Transformation Bible 2020 - 2025

learning, citizen digital academies, and public–private partnerships to build a strong digital skills ecosystem.

2. **National Coalition for Digital Skills and Jobs**[5]
   Coordinated by the **Ministry of Digital Governance**, this coalition implements EU-aligned digital upskilling programs and translates frameworks like **DigComp 2.2** into Greek. Its objectives include promoting digital inclusion initiatives tailored to all citizens, including older adults.

3. **National Academy for Digital Skills**[6]
   Started in May 2020 by the **Ministry of Digital Governance,** the **National Academy for Digital Skills** (Εθνική Ακαδημία Ψηφιακών Ικανοτήτων) is a strategic initiative of the **Ministry of Digital Governance**, implemented by GRNET (ΕΔΥΤΕ), aiming to strengthen digital competencies across the entire population. It includes self-assessment quizzes, digital communication modules, e-government tutorials, and safe browsing practices. The National Academy for Digital Skills also structures its educational content based on the **European Digital Competence Framework** (DigComp 2.2), ensuring that its programs align with EU standards for developing digital skills across all population groups, including older adults.

4. **Third e-Age: Digital Empowerment of the Elderly**[7]
   A focused program led by the **National Academy for Digital Skills**, offering personalized training through "Digital Assistant-Trainers" in municipal Digital Corners and community spaces. Since its launch in late 2022, it has supported 1,400+ seniors (avg. age 71.5) with over 7,000 training sessions, enhancing their ability to use ICT

[5] Greece - National Coalition for Digital Skills and Jobs

[6] Εθνική Ακαδημία Ψηφιακών Ικανοτήτων

[7] «3η e-λικία: Ψηφιακή ενδυνάμωση των ηλικιωμένων» - nationalcoalition.gov.gr

tools, access e-services, and communicate online, while fostering digital confidence and citizenship.

5. **DigitalLife4ALL (INTERREG MED)**[8]
   DigitalLife4ALL (INTERREG MED) is an EU-funded initiative that promotes digital inclusion by establishing Digital Skills Centres in local communities across Greece. It focuses on vulnerable groups, particularly seniors and people with disabilities, offering accessible in-person and online training. The program aims to build confidence in using digital tools safely for everyday tasks, such as accessing public services and online communication.

6. **AGE-TECH Thessaloniki (2025)**[9]
   An ongoing pilot project in Thessaloniki that began in January 2025, training older adults and educators in digital and AI skills. It aims to build local learning networks and foster intergenerational digital literacy.

Alongside the initiatives already mentioned, it is important to mention that in July 2025, the **Greek government** launched a **€6.8 million** national program aimed at enhancing the **digital skills of seniors** and people with disabilities, establishing 120 digital training hubs across the country to promote equal access to digital tools and services.[10]

8 https://pta.gov.gr/el/erga/digitallife4all-an-adult-lifelong-learning-initiative-to-enhance-the-digital-skills-smart-competencies-of-seniors-older-adults-people-with-disabilities-persons-in-vulnerable-social/

9 AGE-TECH Thessaloniki, January 29-30 2025 - EN.O Greece

10 https://athens-times.com/greece-launches-e6-8-million-program-for-digital-empowerment-of-seniors-and-people-with-disabilities/

Lastly, the **General Secretariat for Lifelong Learning and Youth**, under the Ministry of Education, Religious Affairs and Sports, occasionally promotes programs that are open to seniors (although uptake and targeting remain limited).

2. Main Challenges

The most common digital challenges seniors in Greece face can be grouped into four key areas:

- Low digital skills (lack of basic knowledge)
- Difficulty using devices and apps (complex interface)
- Lack of confidence
- Vulnerability to scams (phishing etc)
- Accessibility issues (especially in rural areas)
- Physical and Cognitive Decline

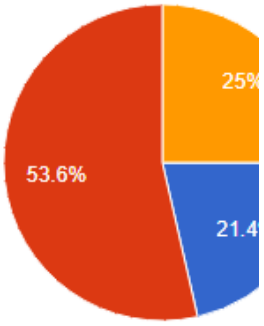
3. Trainers' Findings

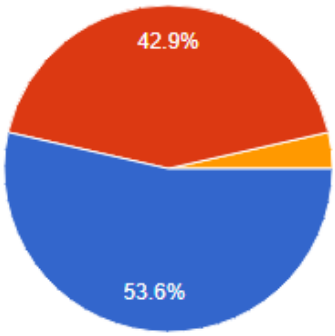
General Information

A total of 28 trainers participated in the questionnaire. Their demographic and professional profiles are summarized as follows:

Age:

The majority of trainers were aged **30–39 years (53.6%)**, followed by those aged **40–65 (25.0%)** and **18–29 (21.4%)**.

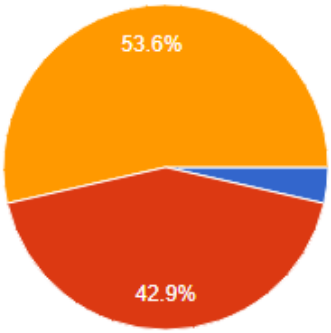




Gender:

53.6% identified as **male** and **42.9%** as **female**.

Educational Background:



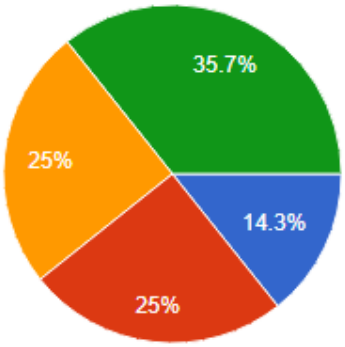
Most participants held university-level qualifications (master's degree 53,6%, bachelor's degree 42,9%), with a strong representation from fields such as **education, ICT, and social sciences**.

Project Partners

Years of Experience in Teaching or Training:

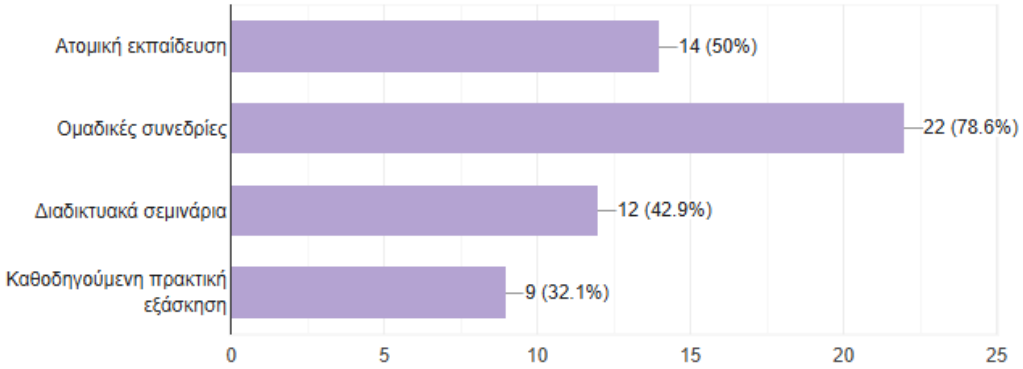
Trainers had varied levels of experience:

- **1–3 years:** 25.0%
- **4–6 years:** 25.0%
- **7–10 years:** 14.3%
- **Over 10 years:** 35.7%

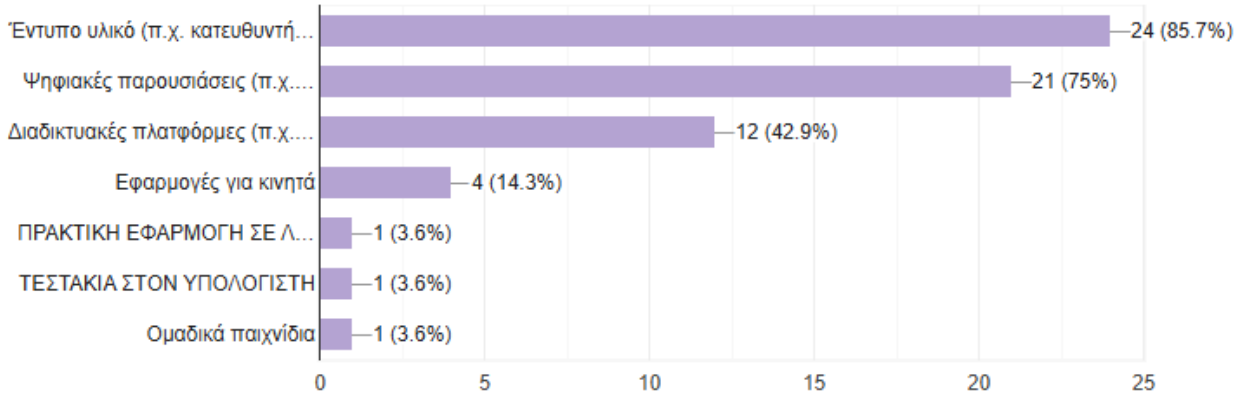


Trainers' Questionnaires & Focus Groups Findings

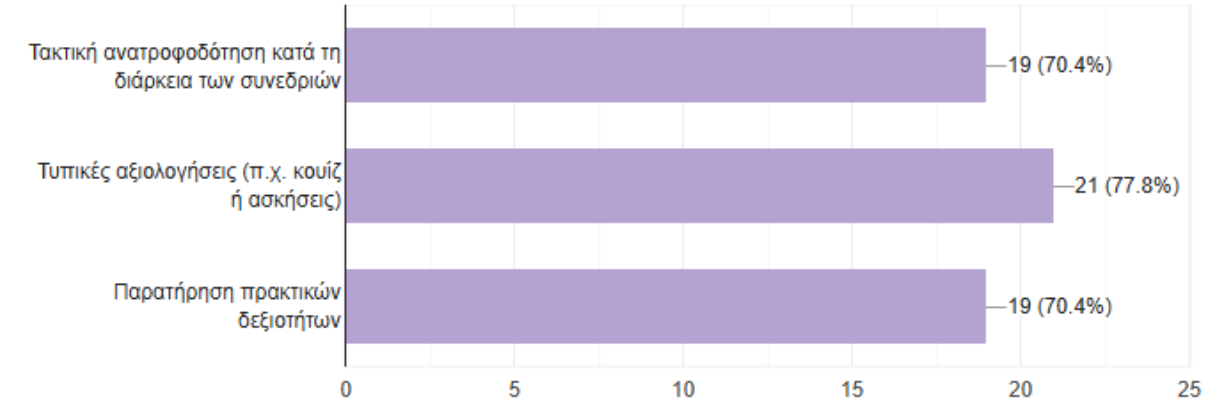
Regarding the question **"What teaching methods do you currently use for digital skills training?"**, the majority of trainers **(78.6%)** reported using **group sessions**, followed by one-on-one instruction (50%) and online webinars (42.9%). A smaller portion (32.1%) employs guided practical exercises.



For the question **"What resources or tools do you use during your training sessions?"**, most trainers **(85.7%)** reported using **printed materials** such as guidelines and manuals, while **75%** used **digital presentations** (e.g., PowerPoint, Canva) and video content.

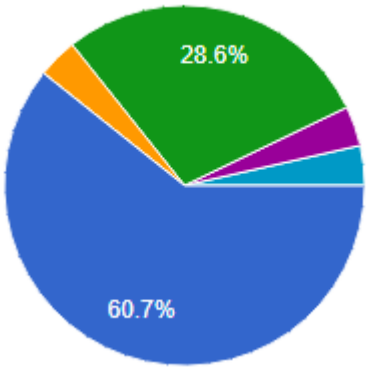


For the question **"What assessment methods do you use to track the progress of seniors in learning digital skills?"**, most trainers **(75%)** reported using formal assessments such as **quizzes** or **exercises**. Additionally, 67.9% rely on ongoing feedback during sessions and practical skill observation.

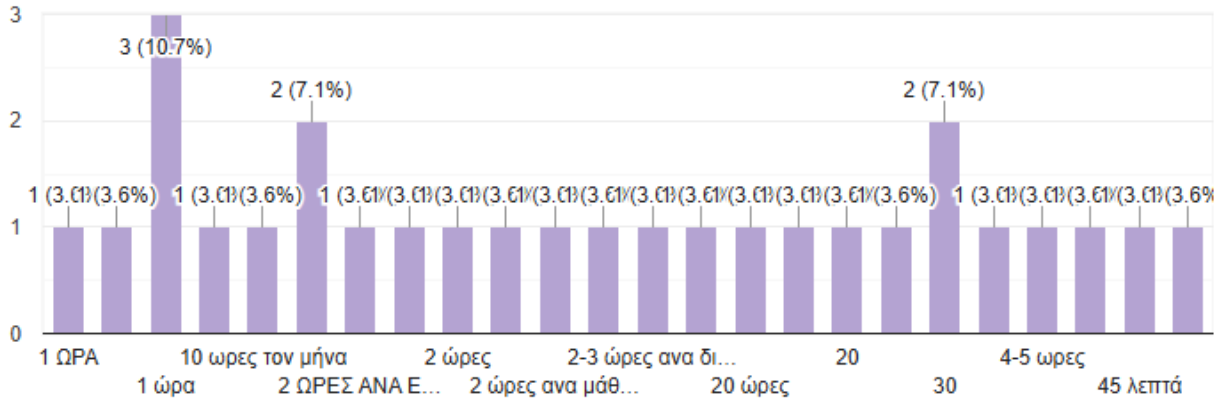


For the question "**Based on your experience, what is the most suitable training format for adults in general and seniors in particular?"**, most trainers (**60.7%)** preferred **in-person**

group lessons. Another **28.6%** selected **hybrid** models that combine face-to-face instruction with online or recorded lessons. Very few (3.6%) favored live online classes.



For the question **"What training duration would you recommend?"** responses varied significantly, from **2 to 60 hours**. This wide range likely reflects **different interpretations of the question**, as participants may have understood it to refer to the weekly schedule, total program duration, or length per session.

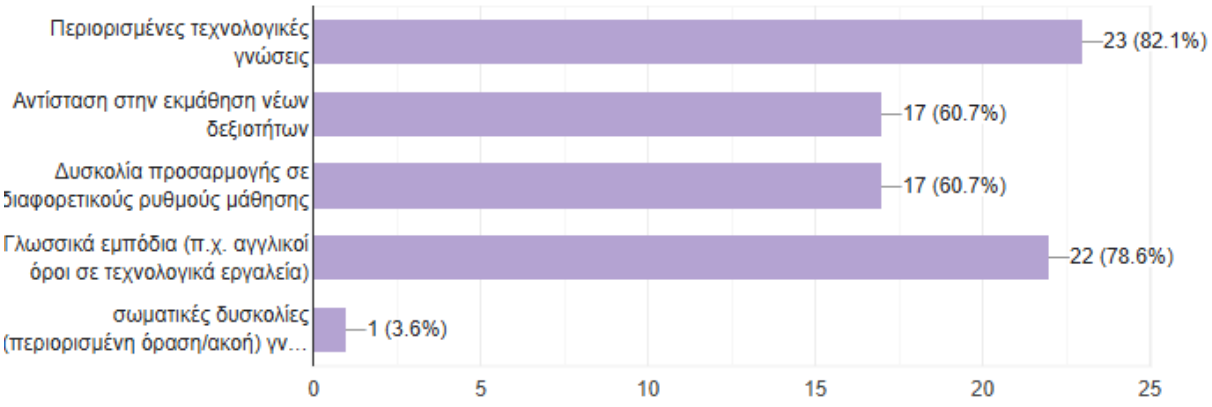


For Question 11: **"Do you have any other suggestions regarding needs, methodology, or tools?"** A summary of the answers is as follows:

- **Pedagogical Approaches**: Focus on practical applications, real-life scenarios, hands-on practice, and clear, understandable material for all skill levels, especially beginners. Short, concise content with frequent repetition for older learners, incorporating breaks and continuous feedback.
- **Accessibility**: Ensure readable documents with large fonts and step-by-step visuals.
- **Socialization**: Emphasize in-person classes to promote social interaction.

- **Safety & Trust**: Address concerns about security and financial transactions, especially for older adults, by demystifying complex concepts.
- **Group Dynamics**: Suggest small, flexible groups, potentially incorporating group games based on student-chosen scenarios.

For the question **"What are the main challenges you face when teaching digital skills to seniors?"**, most trainers **(82.1%)** pointed to **limited technological knowledge** as a major barrier. **Language barriers**, such as English terms in tools and interfaces, were also noted by **78.6%** of respondents. Additionally, **60.7%** mentioned both **resistance to learning new skills** and **difficulty adapting to varied learning speeds**. A small number (3.6%) cited issues such as physical or cognitive difficulties and lack of patience.



Summary

In this summary we present the main findings from the 28 trainer questionnaires and six focus groups conducted with educators of older adults in the region of Kavala, Greece. Grouped and analysed collectively, the findings led us to the following key conclusions:

1. **Digital Inequality and Readiness Gaps**
   Trainers consistently describe a deep digital divide, not merely in access or usage, but in the very readiness to engage. Many seniors lack exposure to digital tools, and often face linguistic and cognitive barriers that make even basic actions, like password creation or understanding pop-ups, feel overwhelming. These are not isolated incidents but persistent structural gaps shaped by age, education, and previous exclusion from digital transformation.

2. **Emotional Resistance and Fear of Failure**
   Beyond technical skills, emotional blocks play a decisive role. Seniors frequently express fear of breaking something, shame in asking for help, or anxiety when faced with English-language content. Trainers report that emotional reassurance is often as important as instructional content. The learning environment must be carefully structured to restore self-confidence, encourage experimentation, and counteract learned helplessness.

3. **Pedagogical Adaptation and Human-Centered Approaches**
   Trainers overwhelmingly emphasized that teaching seniors requires a departure from conventional digital training. Effective approaches are personalized, slow-paced, highly visual, and grounded in real-life scenarios. Learning often happens in cycles of repetition and guided practice, rather than linear progression. Successful sessions prioritize patience, trust-building, and peer collaboration, with trainers often taking on a mentorship role more than that of a formal instructor.

4. **Gaps in Policy and Resource Support**
   Although trainers use diverse resources, ranging from printed manuals to video guides and collaborative tools, they frequently cited the lack of structured, senior-specific materials. Many expressed the need for institutional guidance, access to pre-approved curricula, and train-the-trainer programs tailored to the pedagogical needs of working with older learners. This gap points to a broader policy shortfall in recognizing senior digital education as a specialised and supported field.

5. **Diverging Needs Within the "Senior" Category**
   Lastly, both questionnaire and focus group data made clear that the senior population is not homogeneous. Adults aged 60-67 may still be in the workforce and seek task-oriented skills (e.g. Excel, banking), while those 70+ often need support in

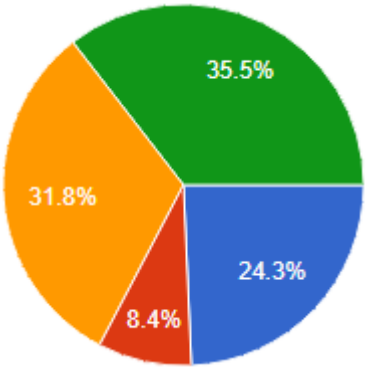
everyday connectivity (video calls, photos, appointments) and online safety. Trainers noted the importance of tailoring content to motivation levels, age groups, and digital exposure.

4. Seniors' Findings

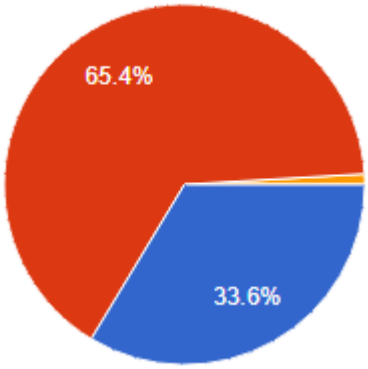
General Information

A total of **107** participants answered the questionnaire.

- **Age**:
  The largest age group was **65 and over** (35.5%), followed closely by respondents aged **40–65** (31.8%). Younger participants aged **18–29** accounted for 24.3%, while **30–39** made up 8.4%.



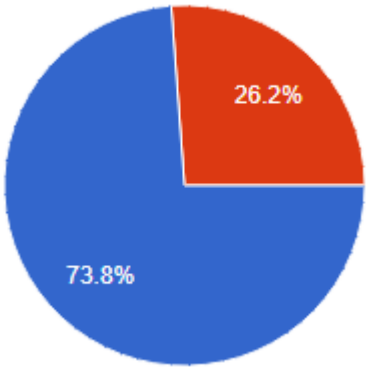
- **Gender**:



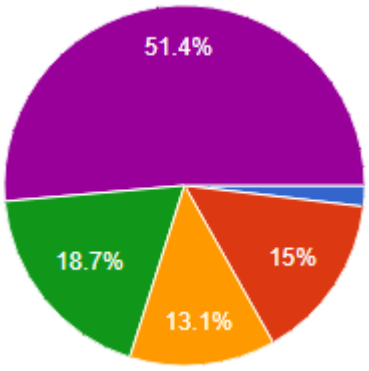
The majority of participants were **women (65.4%)**, with **men representing 33.6%**, and a small percentage (0.9%) choosing not to specify.

- **Place of Residence**:

  Most respondents live in **urban areas (73.8%)**, while **26.2%** reported living in rural or provincial regions.



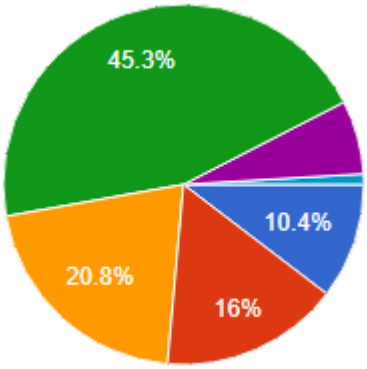
- **Educational Background**:



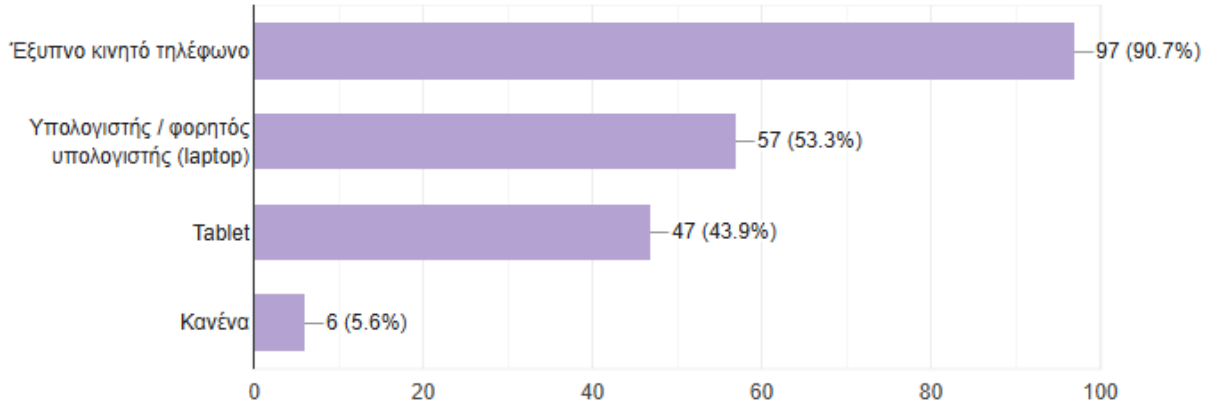
Over half of the participants (**51.4%**) hold a **university degree or higher**, while 18.7% have completed high school, 15% primary school, and 13.1% junior high. Only 1.9% reported **no formal education**.

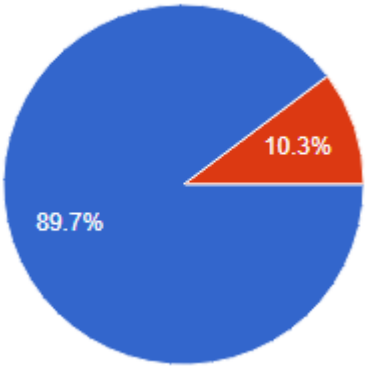
Seniors' Questionnaires & Focus Groups Findings

In Question 5: **Previous Profession**, most respondents reported previous experience in service-related sectors (45.3%), followed by industry/manufacturing (20.8%) and education (16%). Smaller portions had worked in administration (10.4%), agriculture or forestry (6.6%), and NGOs (0.9%).



When asked about **the digital devices they own** (question 6)**,** most respondents reported owning an internet-enabled smartphone (90.7%), followed by a laptop or desktop computer (53.3%), and a tablet (43.9%). Only 5.6% stated that they do not own any digital device, indicating that the vast majority of participants have access to at least one form of digital technology.

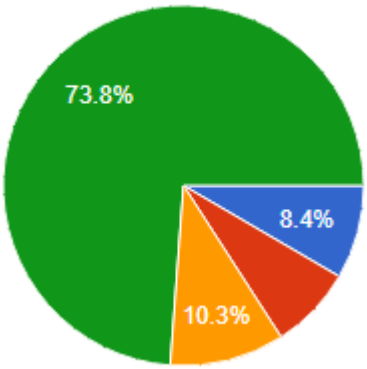


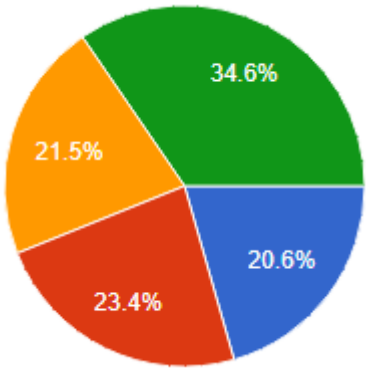


For question 7: **“Do you have internet access at home?”**The vast majority of participants (**89.7%**) reported having **internet access at home**, while a smaller share (**10.3%**) indicated that they do **not have home internet**.

For Question 8 **- Frequency of Internet Use**:

Most participants reported using the internet **daily (73.8%)**, while smaller groups use it **occasionally (10.3%)**, **rarely (7.5%)**, or **never (8.4%)**. This shows that although regular use is common, a significant minority still has limited or no engagement with online activities

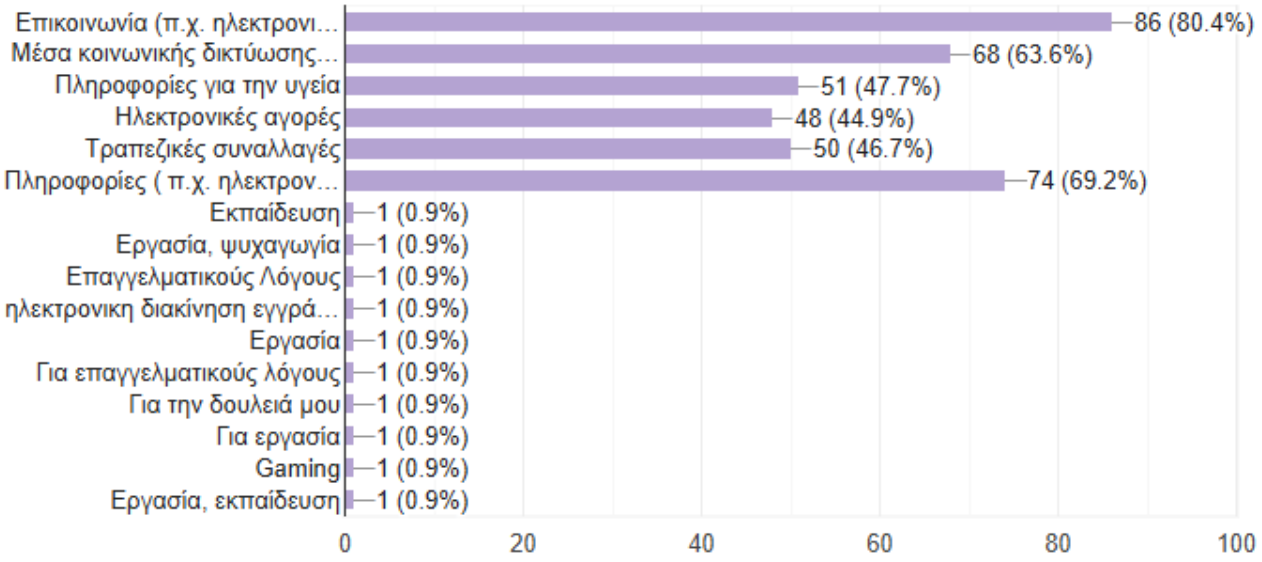




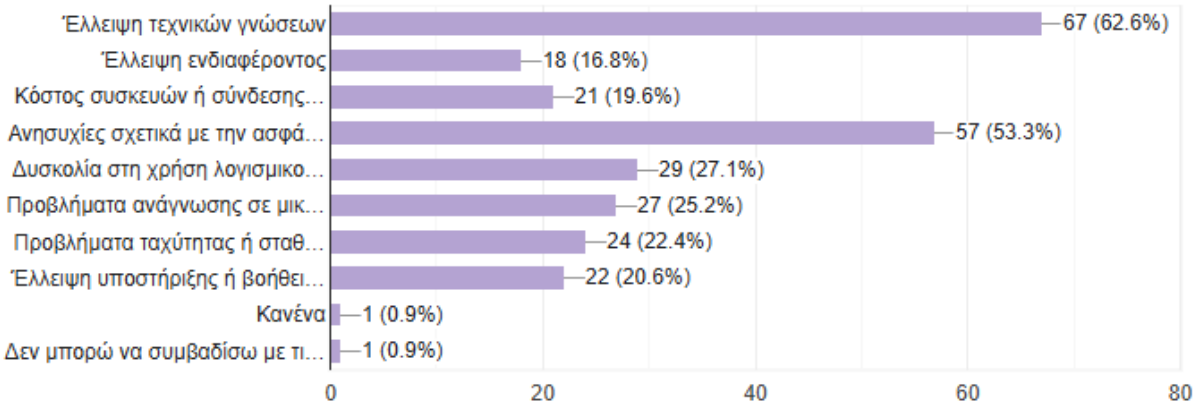
For question 9, participants were asked **how many hours per day they use digital communication tools**. The largest portion (**34.6%**) reported using them for **more than 4 hours daily**. This was followed by **23.4%** who use them for **1–2 hours**, **21.5%** for **3–4 hours**, and **20.6%** who reported **less than 1 hour per day**. This indicates that while digital communication is a regular

part of life for many, intensity of use varies significantly among respondents.

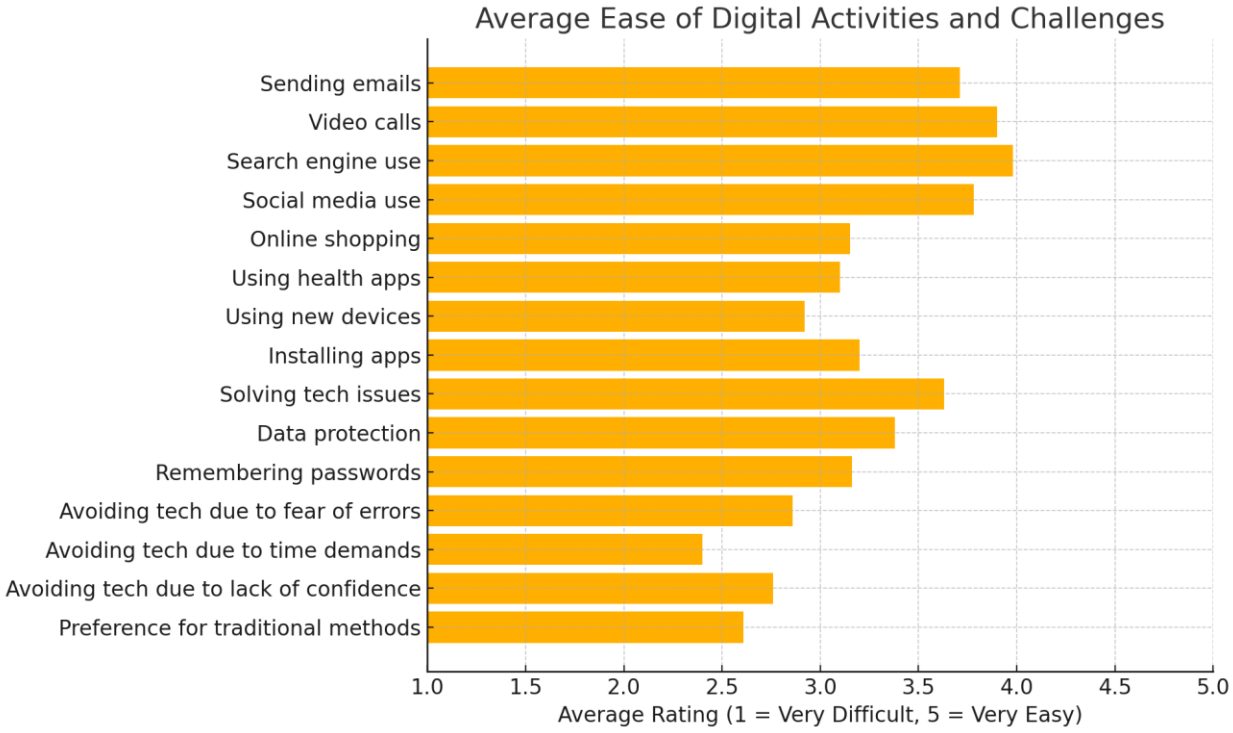
For question 10, respondents were asked **for what purposes they use technology.** The vast majority cited **communication** (via email, WhatsApp, or Viber) as the primary reason, selected by **80.4%**. This was followed by accessing information such as **online news** and **events** (**69.2%**), and using **social media platforms** like **Facebook** and **Instagram** (**63.6%).** Other common uses included health information (47.7%), banking (46.7%), and online shopping (44.9%). Work-related and educational purposes were rarely mentioned (below 3%), indicating that most technology use among respondents is for personal rather than professional needs.



For question 11, respondents identified the **main difficulties they face when using technology.** The most common issue was **lack of technical knowledge (62.6%),** followed by concerns about **online safety (53.3%).** Other frequently mentioned challenges included difficulty using software or apps (27.1%), small screen readability (25.2%), and internet connection issues (22.4%). Some also pointed to lack of support from others (20.6%), cost-related barriers (19.6%), and lack of interest (16.8%). Very few participants reported no difficulties (0.9%) or being overwhelmed by constant digital changes. (0.9%).

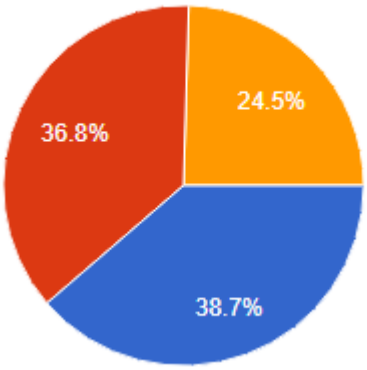


In question 12, participants had to answer how comfortable they are performing some tasks and rank their **Average Ease Of Digital Activities And Challenges**, rating it from 1-5 (1 being not comfortable at all, 5 being very comfortable).

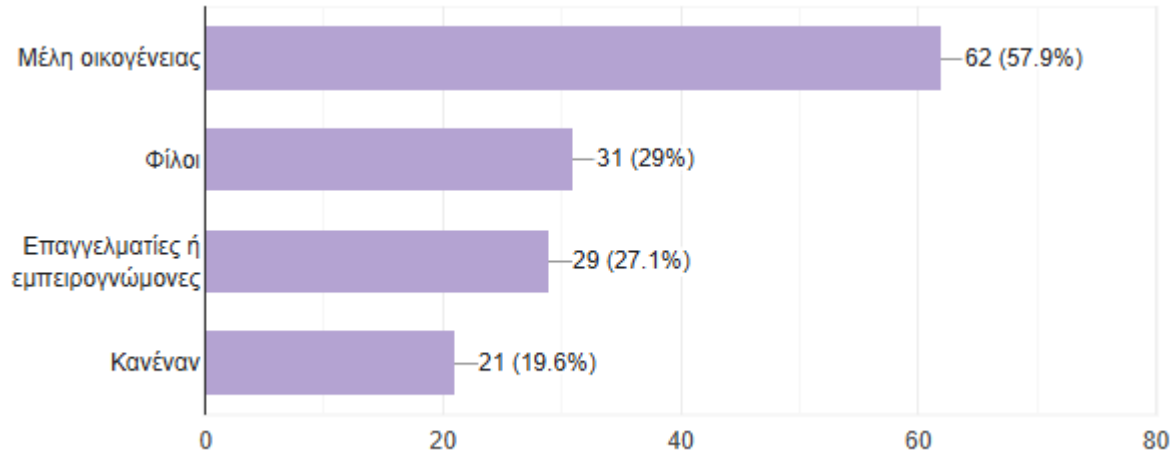


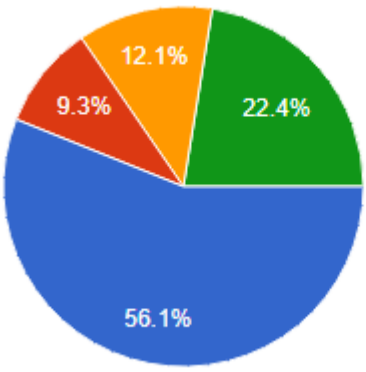
Here is a visual comparison of which areas respondents found easier (e.g., search engines, video calls) versus more difficult (e.g., avoiding technology due to time or confidence issues).

In question 15, **"Do you receive support while using technology**?" **38.7%** of respondents stated that they receive support **regularly**, while **36.8%** reported receiving it **occasionally**. On the other hand, **24.5%** said they **never** receive any support. Although many participants have access to some level of help, a notable portion still navigates technology entirely on their own.



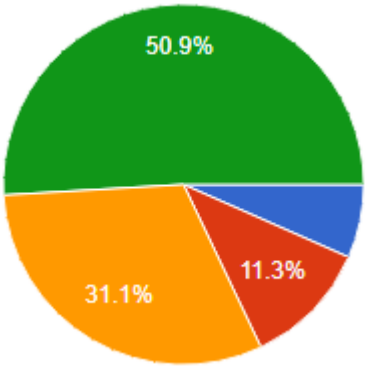
In question 16, *"***Who provides you support while using technology?"**, the majority of respondents (**57.9%**) reported receiving help from **family members**. **Friends** were cited by **29%**, and **professionals or experts** by **27.1%**. Interestingly, **19.6%** of participants said they **do not receive help from anyone**, highlighting a significant group with limited support networks

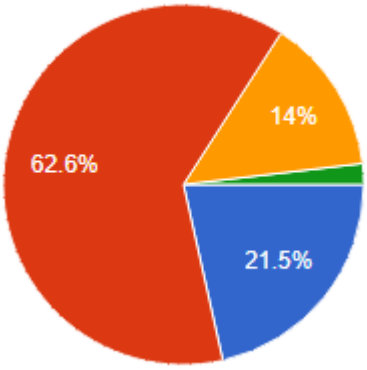




In question 17, **"If you had the opportunity to attend a course to improve your digital skills, what format would you prefer?**", the majority of respondents (**56.1%**) favored **in-person group classes**. Another **22.4%** preferred **hybrid formats** combining online and in-person instruction. Smaller portions selected **live online classes (12.1%)** or **pre-recorded online lessons (9.3%)**, indicating a clear preference for face-to-face learning environments

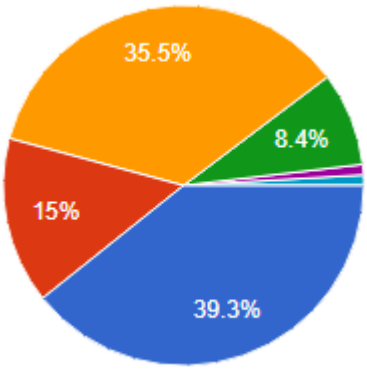
In question 18, "How important do you consider improving your digital skills?", half of the respondents (**50.9%**) rated it as **very important**, while **31.1%** said it is **moderately important**. Smaller percentages considered it **slightly important (11.3%)** or **not important at all (6.6%)**.





In question 19, "How much time are you willing to dedicate to improving your digital skills?", the majority (**62.6%**) were willing to spend **1–2 hours per week**. About **21.5%** preferred **less than 1 hour**, while **14%** could allocate **3–5 hours weekly**, and only **1.9%** were open to more than 5 hours.

As mentioned earlier for question 20, "What is your main motivation to improve digital skills?", 39.3% cited **professional needs**, **35.5%** prioritized **communication with family and friends**, **15%** aimed to simplify **daily tasks**, and **8.4%** were driven by **personal interests or hobbies**. Only **0.9%** felt they didn't need further improvement.



Summary of findings

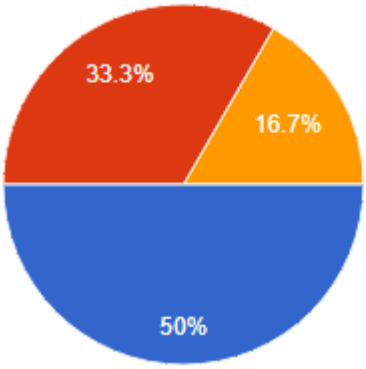
The collected data from 107 questionnaires and focus groups with older adults in Greece highlight a growing but uneven engagement with digital technologies among seniors. Most respondents use basic digital tools (primarily for communication and information) but their usage remains limited in scope. Email, search engines, and video calls are relatively well adopted, while more advanced or transactional activities such as online shopping, app use for health services, and data privacy management are much less confidently handled. Many seniors report facing significant barriers, including limited technical knowledge, fear of making mistakes, and challenges with passwords and app installations. These are compounded by emotional factors such as low confidence, anxiety, and a sense of digital exclusion. Focus group participants expressed frustration with fast-changing technologies and confusing instructions, noting that they often feel left behind or dependent on others. Support systems are inconsistent: while some receive help from family or friends, many remain without regular assistance. Despite this, motivation to learn is strong: most want to improve their skills, especially to maintain independence and stay socially connected. Seniors clearly prefer face-to-face group lessons, paced slowly, and tailored to real-life applications. Printed materials and repeat practice are seen as essential.

Across both questionnaires and focus groups, the findings point to a clear need for simple, practical, and ongoing digital education that matches seniors' everyday needs and learning pace.

5. Organisations' Findings

General Information

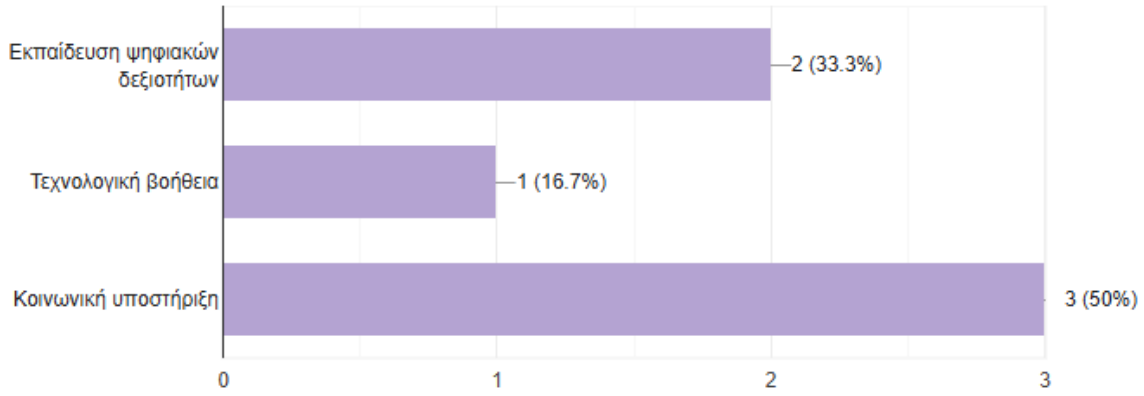
A total of **6 organisations** took part in answering the questionnaire. Here is the organisations' background:



Question 1: Primary Objective of the Organisation
Half of the participating organisations (**50%**) identified their main goal as **providing educational support**. Others focus on **promoting social inclusion** (**33.3%**) or **offering technological services** (**16.7%**).

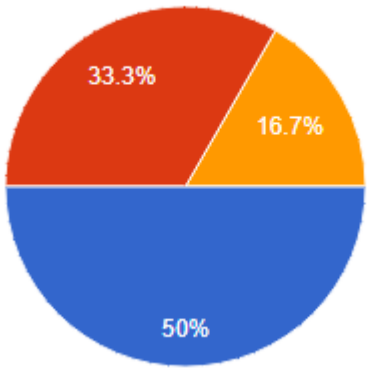
Question 2: Services Offered to Adults and Seniors

The most common service provided is **social support** (**50%**), followed by **digital skills training** (**33.3%**) and **technical assistance** (**16.7%**).



Question 3: Number of Adults/Seniors Reached Annually

Most organisations (**50%**) serve **fewer than 50 older adults** per year, while **33.3%** support between **50 and 100**, and only **16.7%** reach **more than 100** individuals annually.

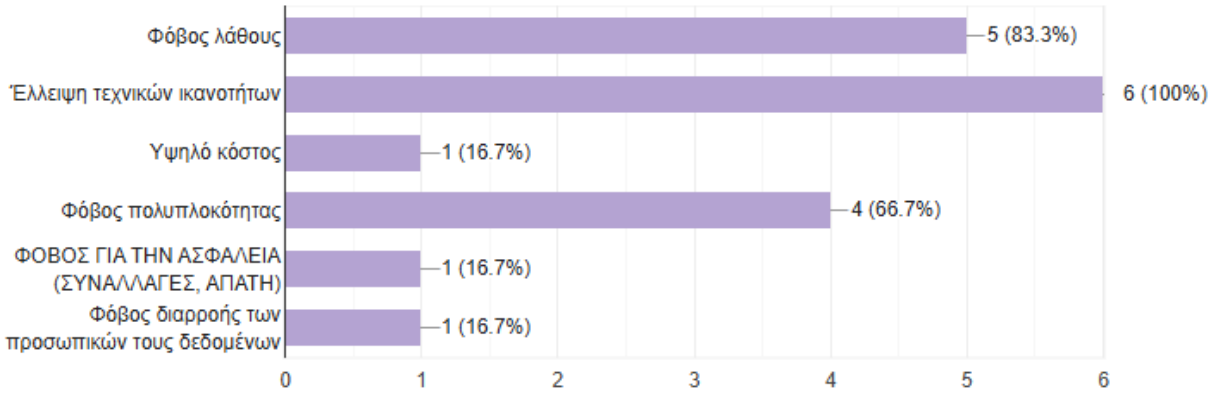


Organisations' Questionnaires & Focus Groups Findings

Question 4: Main Challenges Faced by Seniors

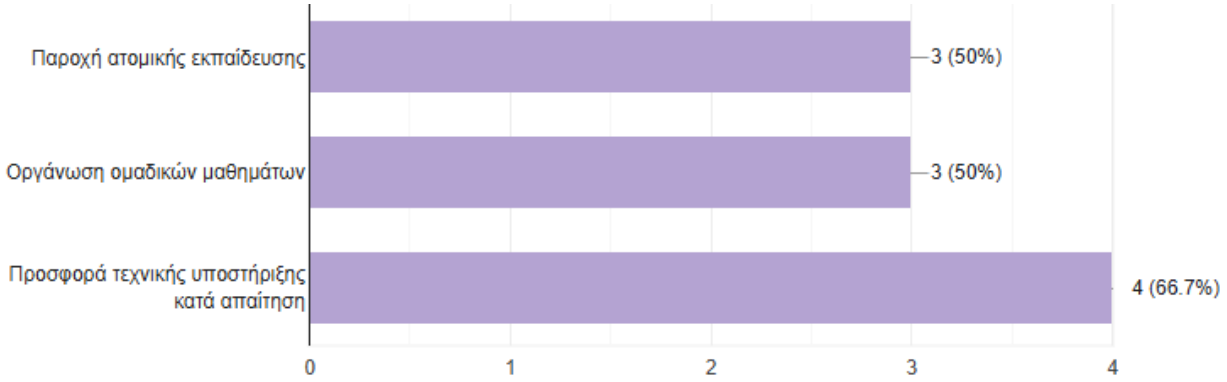
All organisations (100%) identified **lack of technical skills** as a key barrier. Other common issues included **fear of making mistakes** (83.3%) and **fear of complexity** (66.7%). Concerns

around **security, privacy**, and the **cost of technology** were also mentioned, though less frequently.



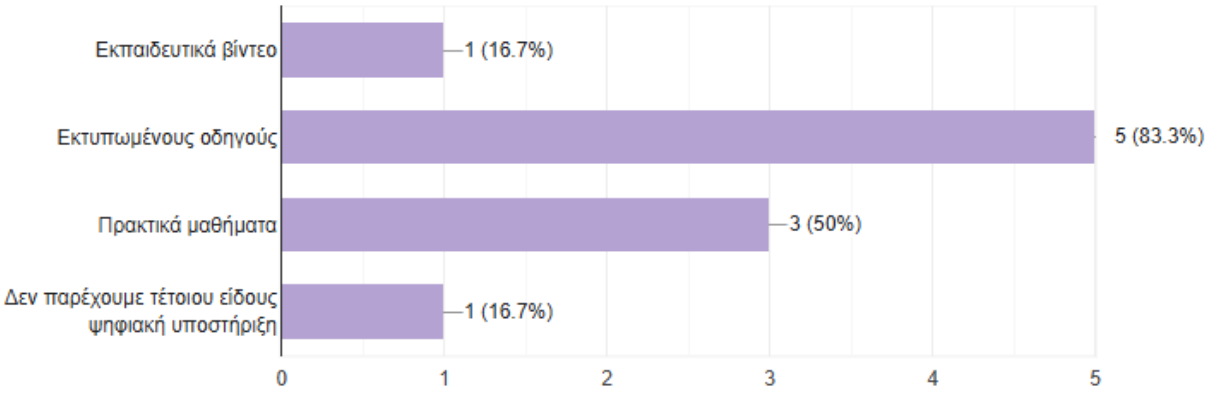
Question 5: How These Challenges Are Addressed

Most organisations provide **on-demand technical assistance**, while half of them provide a combination of **one-on-one training and group lessons**.



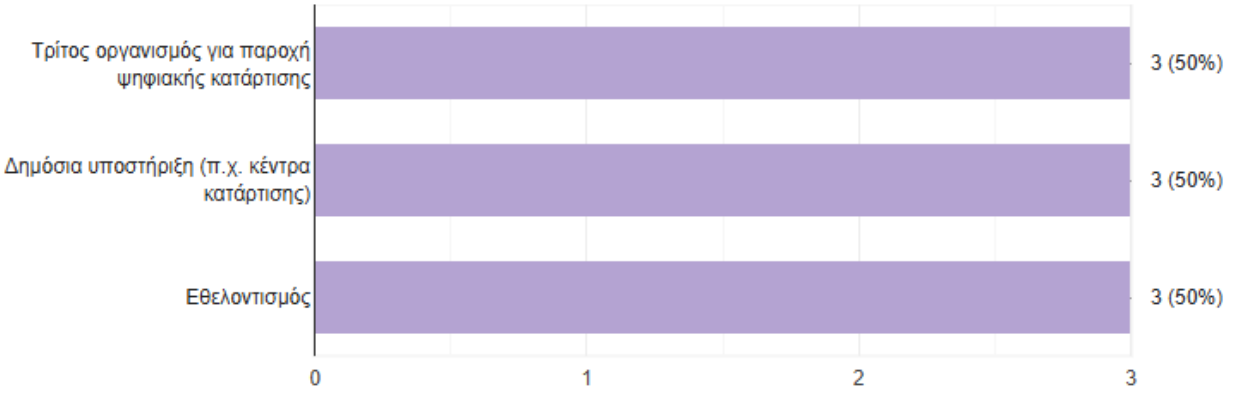
Question 6: Resources Used in Training

The most commonly used resources are **printed guides** (83.3%) and **practical sessions** (50%). A smaller share of organisations also use **instructional videos** (16.7%) or offer no structured resources at all.

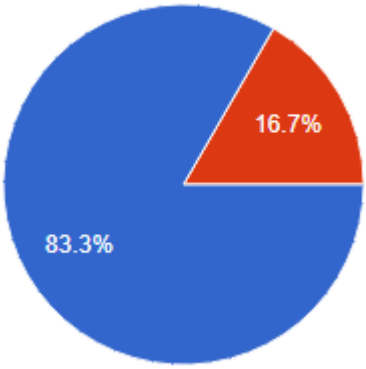


Question 7: Collaboration with Other Entities

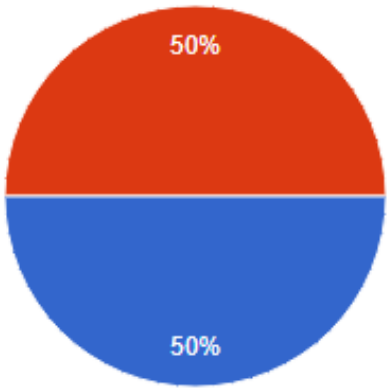
The organisations collaborate with **public training centers**, **volunteers**, or **third-party organisations** to enhance their services. Partnerships often include co-hosted training sessions or resource sharing.



For **question 8**, *"Do you believe there are gaps in the available resources to support seniors?",* a significant **83.3%** of organisations responded "**Yes**", while only **16.7%** answered "**No**".



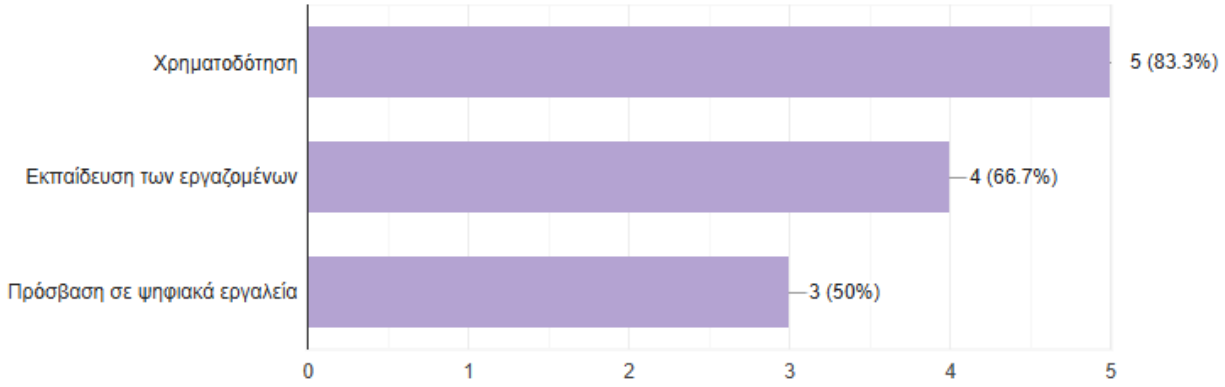
Among the gaps mentioned were the **lack of structured methodologies**, **insufficient subsidized training programs**, and **shortages in tailored materials**. These responses suggest that while organisations are motivated to support seniors, they often lack the standardized tools and funding needed to do so effectively.



For **question 9**, which asked organisations to **identify the main training needs they observe among seniors,** the responses clustered around two core areas: **Basic digital skills**, such as using email and navigating the internet, and **more advanced needs**, including the use of banking apps and online safety practices. This indicates a dual gap: while many seniors are still catching up with fundamental tasks, a growing number require support for securely managing more complex digital services.

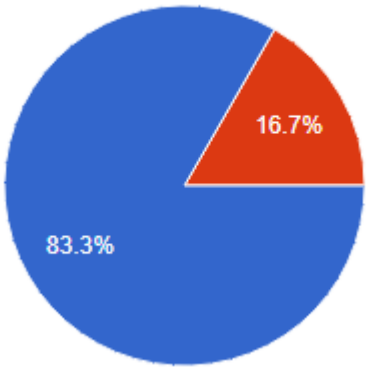
Question 10: What kind of support would enhance your work with seniors? Most organisations emphasized the need for **funding**. **Staff training** and **access to digital tools**

were also mentioned. These were often mentioned together, reflecting a systemic lack of resources.



Question 11: How important is technology for improving seniors' quality of life?

All respondents rated technology as **very important**, showing a strong consensus on its potential to support autonomy, communication, and access to services for older adults.



Question 12: Would you be interested in participating in training programs specifically for seniors?

All organisations expressed **clear interest** in joining such programs, confirming their motivation to expand their knowledge and improve the services they provide.

Summary of findings

The 18 participating organisations reflected a **strong commitment** to supporting the digital inclusion of older adults, despite facing a number of structural and practical challenges. Most serve small numbers of seniors annually, with limited resources and staff capacity. Their primary focus lies in education, social support, and basic digital guidance, though few follow standardized methodologies or structured programs. Organisations consistently identified a **lack of basic digital skills among seniors**, especially in online safety, app use, and device handling as a major barrier. They also highlighted psychological **hurdles** such as fear of failure and lack of confidence. These challenges are often met with individualised support and printed materials, though many noted the absence of comprehensive, ready-to-use educational resources. Nearly all respondents expressed the need for **greater institutional support**, particularly in the form of funding, staff training, and access to equipment. There is unanimous agreement on the importance of technology for seniors' well-being and a strong willingness to engage in future training efforts tailored to this group.

Together, the responses show that organisations are motivated but lack resources. They are eager for better tools, materials, and support to offer more effective and steady digital training for older adults.

6. References & Annexes

References

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5. *https://digital-skills-jobs.europa.eu/en/about/national-coalitions/greece-national-coalition-digital-skills-and-jobs*
6. *https://nationaldigitalacademy.gov.gr/*
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Annexes

Questionnaires

Focus Groups

C. COUNTRY CASE STUDY: ITALY

Authors: Fondazione Università adulti (UNIVIA), Italy

Italy's research findings

1. Current situation of seniors regarding digital readiness, digital safety, and digital skills of seniors

The Auditel-Ipsos report (May 2025) reveals a surprising transformation of the target aged 65-74 years old, in a country with more than 121 million screens, those over 65 are as connected as millennials. This age group has become a strategic segment for media and investors.

In Italy, as in other European countries, digital skills are associated with the sociocultural characteristics of the population. The Istat 2023 report shows that just 19.3% of adults aged between 65 and 74 had at least basic skills in the five main domains defined by the *Digital Competence Framework 2.0* (the common European framework of reference for digital skills) compared to the EU average of 28.19% for the same age group. At the same time, 45.7% of the total population aged 16–74 had basic digital skills, while 41.2% of people aged 65–74 had no digital skills at all, indicating a significant generational digital gap.

At the current rate, the target set by the European Union focusing on achieving universal basic digital skills for at least 80% of the adult population by 2030 is in serious danger of not being met. The people most penalized are the elderly, citizens with low education and those who are outside the job market.

In 2023 the Internet diffusion rate among families residing in Italy with at least one member aged 16-74 is 91.9% and continues to be a value almost in line with the EU27 average (93% in 2023). In households consisting in elderly people only (conventionally individuals aged 65 and over) there is less Internet diffusion, just over half of them (53.4%) have Internet access. The regions with a better situation are Lombardy (86.8%), Trentino-Alto Adige and Lazio (both with 86.7%). The demographic size of the municipality of residence continues to be a discriminating factor: in the central municipalities of metropolitan areas the connection rate exceeds the national average by 4.2 percentage points (88.3%), whereas in municipalities with up to 2 thousand inhabitants it stops at 76.9%.

An analysis of the individual Italian regions shows a strong gradient between the Centre-North and the South, with the exception of Sardinia which is around the average value. The lag of the South (74.8%) is made particularly evident by a gap of 7.3 percentage points compared with the North and 6.5 percentage points compared with the Centre.

The qualification held by the family members is also positively correlated with the availability of Internet access: 97.8% of families with at least one graduate member access

the Internet from home, compared to 59.8% of those in which the highest qualification is at most the middle school diploma.
The Istat report highlights, as well, some differences between the male and female population. In 2023 the 82.4% of men aged 6 years and over access the Internet compared to 76.8% of women. It should be pointed out, however, that such a gap develops mainly in the older age groups, in fact, up to the age of 59, gender differences are zero and in some cases are favourable to women, while, for example, from the age of 65 and over the difference exceeds 8 percentage points in favour of men.
By analysing separately the five dimensions, by the *Digital Competence Framework 2.0* on the basis of which the composite indicator is calculated, it is possible to draw a map of the elements of strength and weakness in the levels of digital competence of citizens resident in Italy. Among the population aged 16-74 who have used the Internet in the last three months, 79.8% have advanced skills in the field of "Communication and collaboration", 60.6% in that related to "Literacy on information and data", almost half (49.9%) have advanced skills in "Problem solving". In the domains "Digital content creation" and "Security", however, the highest percentages of people without digital skills were recorded, 26.8% and 27.9% respectively.
It should also be highlighted that compared to 2021 there is a decrease of 1.3% for advanced digital skills in the domain "Security", while for all the others there are significant increases; in particular, the share of people with advanced digital skills in the domain "Communication and collaboration" increases by 4% and by almost 3% in the domain "Troubleshooting".

In Italy, several national and regional initiatives aim to reduce the digital divide among older people by promoting digital literacy and access to online services. These initiatives include training programmes, technical support and awareness-raising campaigns to help older persons to make effective use of new technologies.
ANAP Confartigianato carries out a series of dedicated initiatives and campaigns. Through its territorial groups, it provides concrete tools to access the digital world, at all ages, regardless of educational level. All this means tackling not just digital illiteracy, but also social inequality. Concrete initiatives throughout the national territory are digital literacy courses for over 60s; information meetings open to citizens; projects to promote the digital autonomy of the elderly.
Throughout the Country there are also numerous accredited organizations that promote activities at local level.
Universities for seniors are a widespread reality throughout Italy (e.g. Federuni is a league of senior citizens' universities with 196 registered branches) that often promote courses or workshops about digital literacy. As for Fondazione Università adulti/anziani di Vicenza, these organizations are often a point of reference in the community, promoting social inclusion. They often work closely with Municipalities but also participate in broader projects as Generation Infinity.

Another example is Fondazione Mondo Digitale, a non-profit organisation based in Rome but with other territorial hubs in Milan, Terni, L'Aquila, Catania and Palermo. The organisation offers a digital literacy plan for those over sixty, based on the intergenerational learning model, which involves the entire national territory and 11 countries. Young people have been brought in to fight social exclusion of those over 60 and they have been building an alliance between schools and senior social centres.

2. Main Challenges

In the midst of the digital transition and the Artificial Intelligence revolution, the European Union is facing a defining challenge: including all citizens, even the most fragile, in the digital

society. The European Commission's report “State of the Digital Decade 2025” highlights this clearly: despite progress, large pockets of exclusion remain, particularly among pensioners and those over 60.
According to official data, only 55.6% of European adults possess basic digital skills and in Italy only 46% of citizens between 16 and 74 years old possess at least basic digital skills.
While there are some support mechanisms, such as intergenerational learning programmes, older people often remain disadvantaged in the digital landscape. Activities such as using smartphones, navigating administrative portals, performing online banking, or understanding app permissions are challenging.
The barriers they face are not only technological, but also social, psychological and infrastructural.
The unfamiliarity with the technology, the fear of making mistakes, the anxiety associated with technology, and frustration at not being able to repeat an action often lead to avoidance or dependence on others, limiting independence and access to services. Seniors' fears ranging from “doing something wrong”, breaking a device, losing data, or becoming a victim of scams, often prevents them from completing operations.
Cyber security is a major concern for older adults, who are particularly vulnerable to scams involving fake banks or anonymous phone calls, fraudulent online stores and imitations of family members. Their limited knowledge of digital security and tendency to trust official communications make them easy targets.
Many older people report difficulties in using national digital systems, particularly those related to health, taxes or administrative procedures. Often online interfaces are not designed with older users in mind, as a result public administration websites, digital identity requests or online medical forms can appear overly complicated. The lack of simplified design, voice support or step-by-step guidance makes these platforms difficult to navigate. Some seniors take more than an hour to fill out simple forms, while others simply give up or seek help from younger family members, some others will opt for in-person services even when digital options would save time.
Another difficulty is the lack of knowledge of existing training programs designed to reduce digital divide. As it is the most cost effective Digital skills workshops’ advertising is often made through social media, newsletters and websites making it difficult to access from whom actually need it the most.

3. Trainers' Findings

General Information

A total of 14 educators completed the questionnaire regarding the teaching of digital skills to the senior. These trainers come from different educational and professional backgrounds but share experiences in digital literacy education.

Participants Overview

From the analysis of the responses, it emerges that the majority have more than 6 years of experience (78.6%) and are aged between 65 and 77 years, mostly men with a slight prevalence of high school graduates. Almost all (71.4%) provided older adults with specific training on digital skills. The most used methods include individual training and classroom group sessions; follows guided practice and, to a minimal extent, online tutorials. The most common tools are digital presentations first (e.g. Power Point and Canva), followed by printed materials, with less uptake of mobile apps and online platforms.
Trainers rely mainly on the observation of practical skills to evaluate the progress of the elderly, followed by regular feedback during lessons and less frequently on formal evaluations.
The main difficulties encountered concern limited technological knowledge and the difficulty of adapting to different learning rhythms, followed by language barriers and resistance to learning new knowledge.
Finally, approximately 78.6% of trainers have experience in digital training aimed at the elderly, highlighting an area of expertise still to be developed for most of the group.

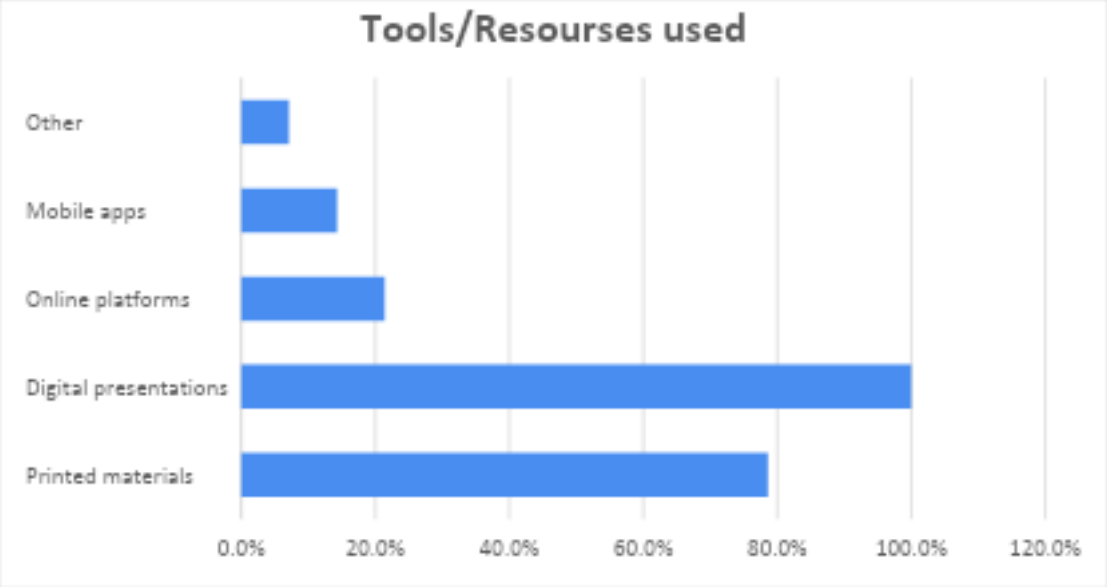
Trainers' Questionnaires & Focus Groups Findings

What teaching methods do you currently use for digital skills training?

The 14 educators who answered this question mainly use group sessions (92.9%). These sessions are likely to promote collaboration, peer learning and a sense of community among participants. Guided practice and individual training come in second place with the same percentage (35.7%). This data emphasis on practical learning, in which participants actively put into practice what they are taught under supervision, as well as the effectiveness of personalized teaching based on the needs of the individual student.
Online tutorials were used by 7.1%, showing some integration of digital content, although less widespread, probably due to limited digital literacy among older adults.

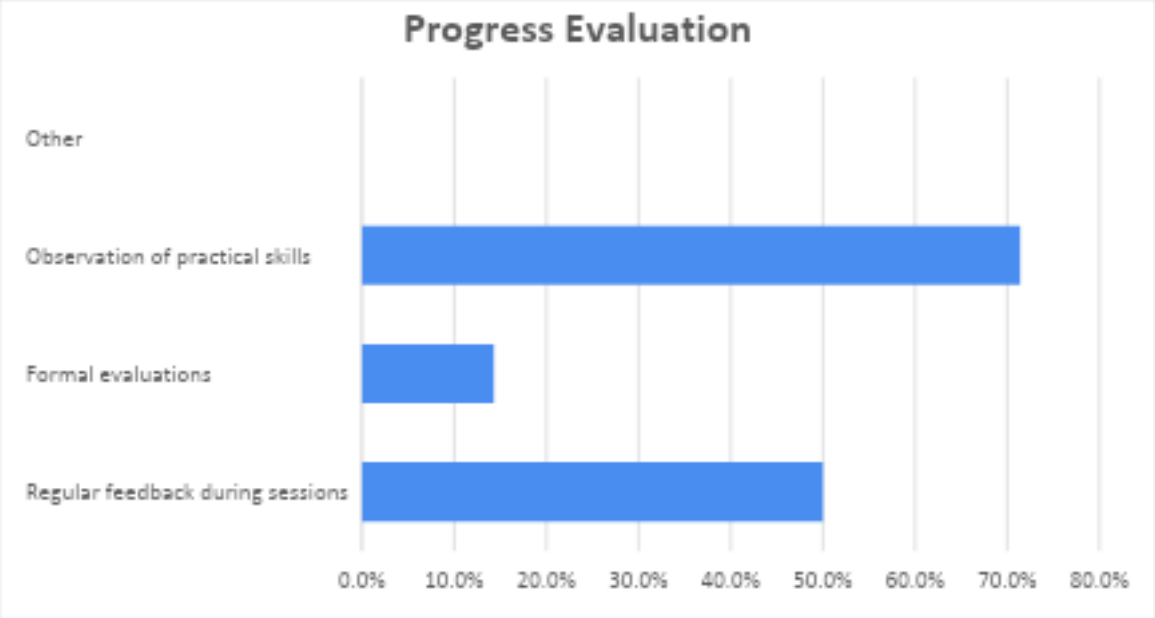
What resources or tools do you use during your training sessions?

Out of 14 educators who responded, digital presentations (e.g. PowerPoint, Canva) were the most commonly used resource, mentioned by 14 out of 14 educators (100%). These tools help visually structure content and are useful for guiding sessions. This is followed by printed materials (for example manuals or handouts) used by 78.6% of the trainers interviewed, demonstrating how concrete and easy-to-follow resources remain essential, especially for elderly people who may feel more comfortable with physical documents, with a lower diffusion of online platforms (for example learning portals, web-based tools) with a percentage of 21.4% use. Mobile apps are the least used (7.1%), highlighting potential obstacles for less tech-savvy participants.



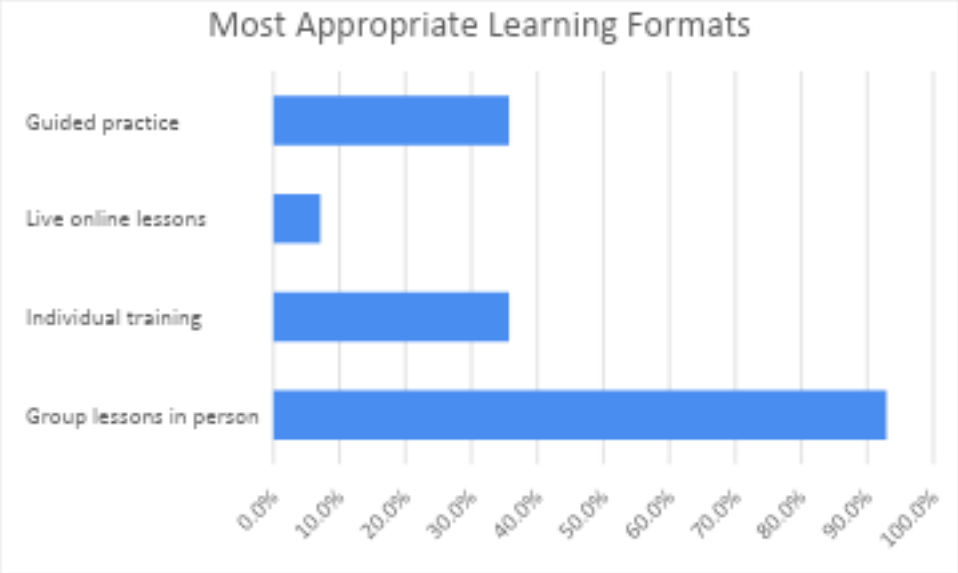
How do you evaluate the progress of older adults in learning digital skills?

When assessing older adults' progress in learning digital skills, educators rely primarily on practical, ongoing methods tailored to students' needs and pace.
The most used method is the observation of practical skills, cited by 71.4% of educators. This involves observing how confidently and autonomously older adults perform digital activities, providing real-time information about their understanding and memorization.
Half of educators use regular feedback during sessions, and only 14.3% of educators said they used formal assessments (e.g. tests or structured assessments). This suggests that while formal tools have a role, they are less favoured in digital adult education, where practical competence and student confidence are often more important than test results.



From your experience, which is the most appropriate format for adults and seniors?

Based on educators' responses, the most appropriate format for teaching digital skills to seniors is the group lessons preferred by 92.9% of participants, reflecting the value of face-to-face interaction, peer support and real-time guidance, especially important for older adults who may not have self-confidence or previous digital experiences.
Individual training and guided practice follow both 35.7%.
Live online classes were the least preferred option, mentioned only by one educator. This may be due to technical barriers, connectivity issues, or a lack of immediate practical support, which many seniors still rely on.



What are the main challenges you encounter when teaching digital skills to older adults?

When teaching digital skills to older adults, educators report several key challenges. The most significant obstacles are the limited previous knowledge of technology (92.9%) and the difficulty of adapting to different learning rhythms (85.7%). Many seniors start with minimal digital experience, requiring instructors to start with the basics and move forward at slow peace. In addition, older people often progress at different speeds, which requires a flexible and individualised teaching approach.
Language barriers represent another notable challenge, mentioned by 42.9% of educators. This refers to both general literacy problems and difficulties with the specific technical vocabulary used in digital contexts.
Furthermore, 42.9% of respondents identified resistance to learning new skills as a challenge. This suggests that older people are generally demotivated to learn due to both age and closed-mindedness.

Summary

Data collected from 14 educators reveals consistent priorities and challenges in digital skills training.
Educators most commonly use group lessons, followed by individual training and practical guides, supported by digital presentations and printed materials. They assess students primarily through observation of practical skills.
Key challenges include limited technological knowledge and difficulties in adapting to different learning rhythms, followed by language barriers and resistance to learning new skills. The focus group participants confirmed these obstacles and emphasized the emotional aspects of learning, such as fear of failure, anxiety or embarrassment of fall behind and having to repeat the same a step several time.

In conclusion, training should be practical, personalized and supportive, with a strong emphasis on daily digital activities, a flexible pace and a safe and supportive environment. These insights should guide the design of future programs of our project.

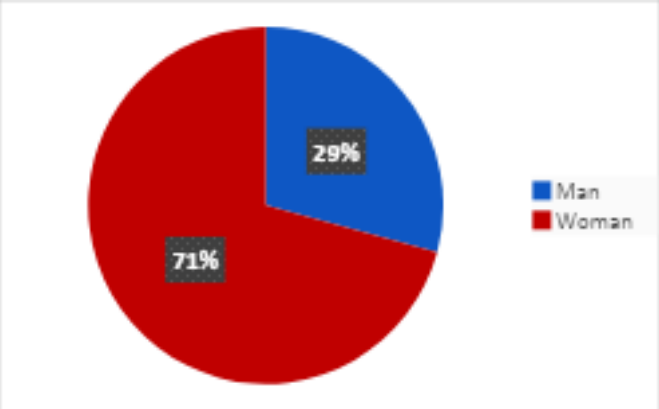
4. Seniors' Findings

General Information

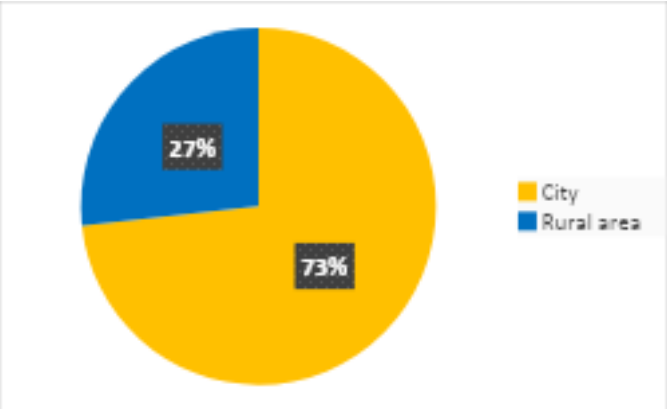
Università adulti/anziani conducted 4 focus groups with 34 participants aged over 65 and issued 120 questionnaires.
Both the focus groups and the questionnaires' goal was to research what challenges the participants face, what methods they prefer and how they feel when using the technology and digital devices. The focus groups

Seniors' Questionnaires & Focus Groups Findings

Gender
Most of the participants are women. 71% answered the questionnaires compared to 29% of men.

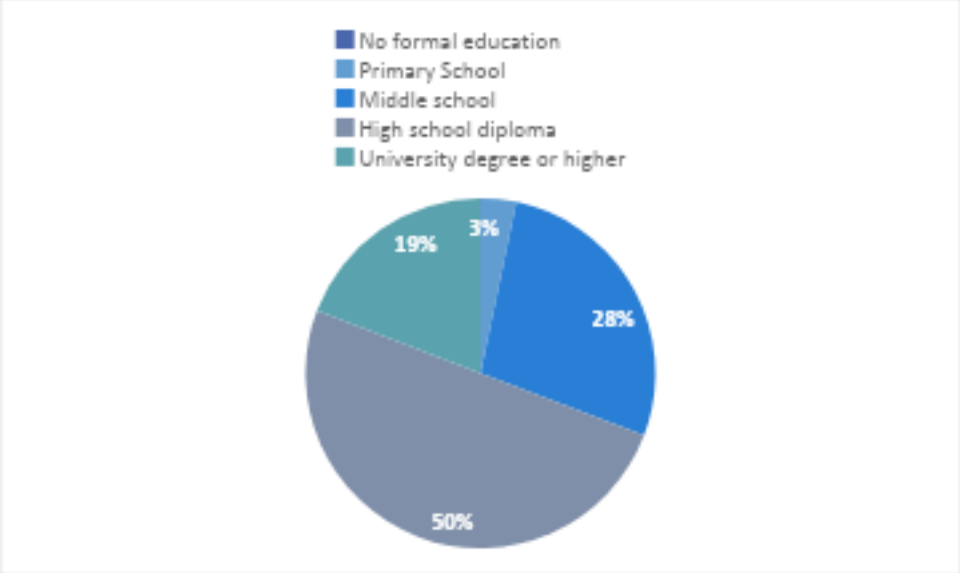


Place of residence
Most of the participants live in the city 73.3%, while 26.7% come from rural areas. The same data is confirmed by the focus groups.



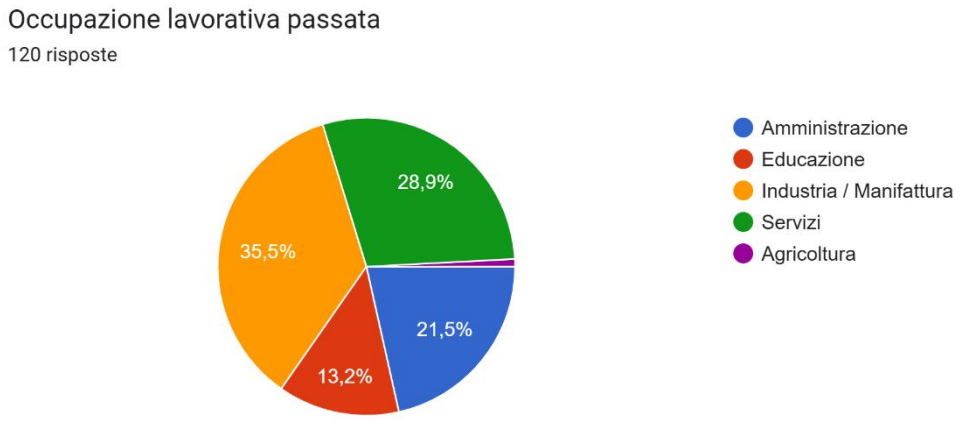
Level of Education

An analysis of the educational background of the participants in the questionnaire shows that the largest percentage, 50%, obtained a high school diploma.
27.5% of those interviewed completed middle school, 19.2% obtained a degree and only 3.3% stopped at primary school. These figures indicate a predominantly middle-level educational profile within the sample.



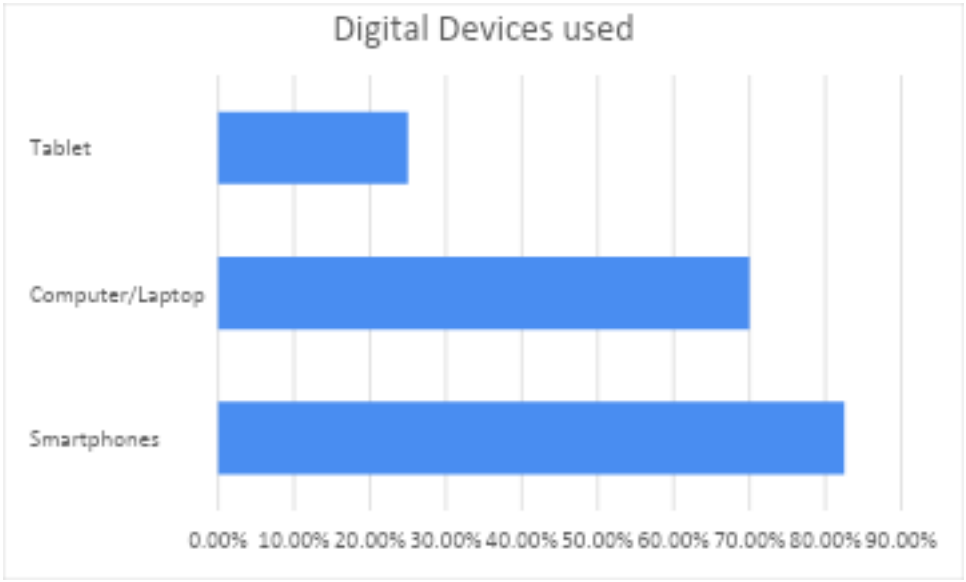
Previous work area

Most of the participants have worked in the Industry or Manufacturing sector (35.5%). A significant portion were employed in the Services sector (28,9%) or had Administration jobs (21.5%). Lastly the 13, 2% was employed in the Educational sector and only the 0.8% was employed in the Agricultural sector.



What digital devices do you own? (multiple answers possible)

Regarding the ownership of digital devices, 82.5% of participants said they have a smartphone, 70% have a computer or laptop, 25% a tablet. Only one participant reported not owning any digital devices



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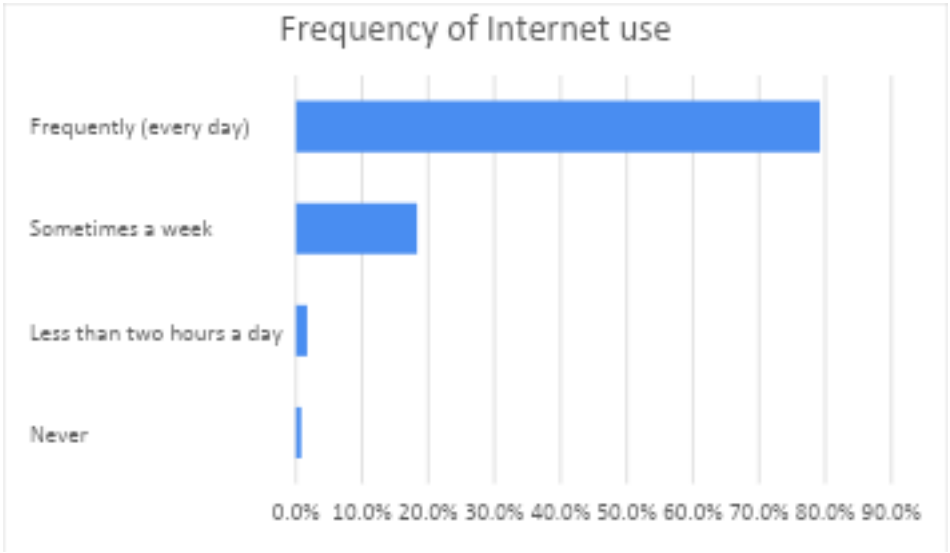
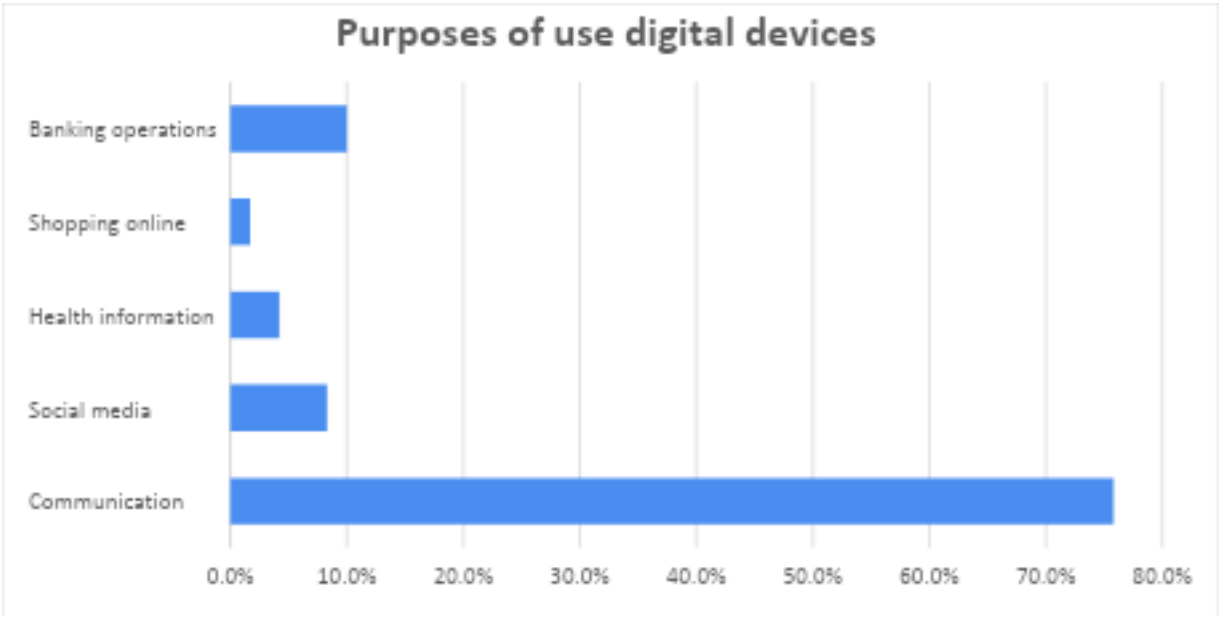
How often do you use the internet?

Data on the frequency of Internet use shows that the majority of participants (79.2%) use the Internet frequently (every day), 18.3% use the Internet sometimes (1 - 2 times a week), while 1.7% said they use the Internet rarely (less than once a week). Only one of the participants stated that he never uses the Internet.



For what purposes do you use technology?

Regarding the purpose of using the Internet, almost all 75.8% of participants said they use it for communication (e.g. email, WhatsApp), 10% use internet banking, 8.3% use it for social media (e.g. Facebook, Instagram), 4.2% for health information. Only 1.7% of participants say they use the internet for online shopping.

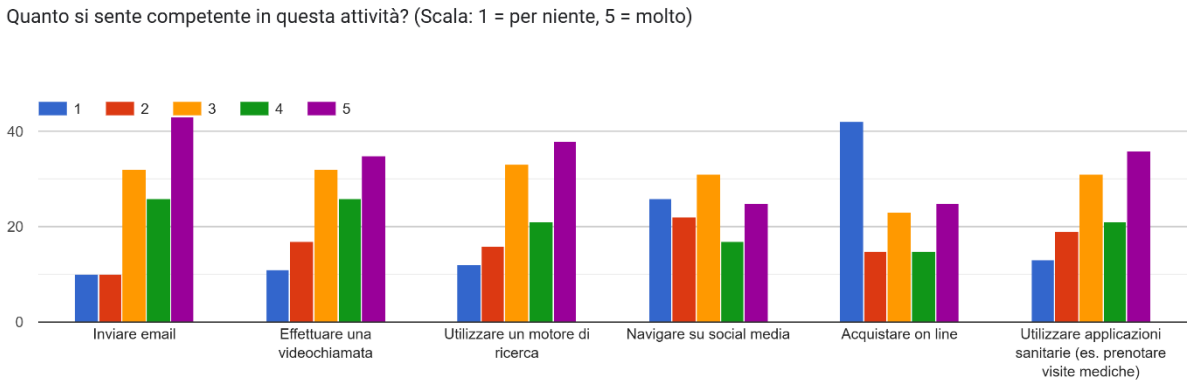


What are the main difficulties you face when using technology?

Participants reported several challenges in the use of digital technologies. The main are: the lack of technical knowledge (29.2%), the concern for online safety (fear of scams) for 25% of seniors, the difficulty of understanding language or using software or applications (18.3%). Some reported reading problems on small screens (7.5%), unstable connection (8.3%) or lack of support or assistance from others (8.3%). A smaller percentage mentioned the lack of interest due to not knowing how to use the technology (2.5%) and a matter of technology high costs (0.1%).

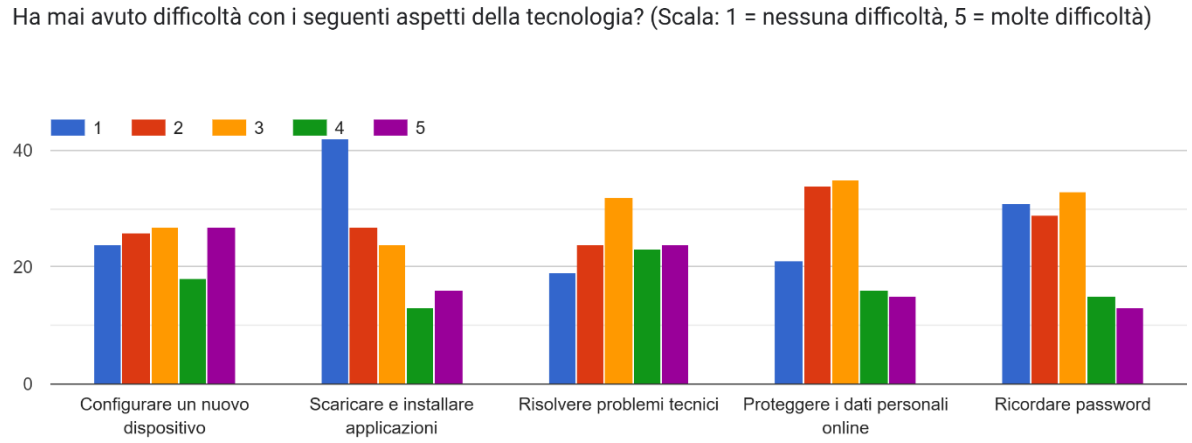
How competent do you feel in these activities?

The results show that among the digital activities listed, seniors feel more confident in sending emails, making calls or video calls; they feel able to use search engines. Participants find it challenging using social media and the online shopping over all.



Have you ever faced difficulties with the following aspects of technology?

The results demonstrate that most seniors have no difficulty downloading applications and remembering passwords while experiencing significant difficulties in setting up a new device; they do not feel very capable of protecting personal data online and solving technical problems. These findings highlight a clear need for targeted support and training in basic digital skills to help older adults understand technology and navigate internet more safely and independently.

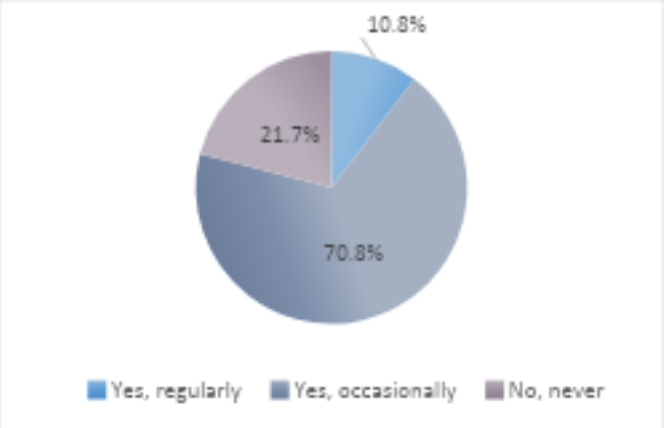


How often do you avoid using technology due to the following reasons?

The data shows that older adults very often avoid using technology due to fear of making mistakes or because they are blocked by not being able to perform an operation they had already done previously, rather than a lack of will to use it. Anxiety, anger and frustration are much more influential emotional barriers than practical ones, such as the feeling that it takes too long or the preference for traditional methods. This suggests that seniors are not disinterested in technology itself, but need more support to build trust, security and a safe environment in which to learn without fear of failure.

Do you receive support when using technology?

When asked if they receive support when using technology 10.8% of the participants reported receiving help regularly, 70.8% receive support occasionally and 21.7% do not receive any kind of support. This highlights the importance of having access to consistent help, which clearly plays a key role in helping older people interact with digital tools more safely and frequently.



Who do you receive support from?

The majority of older adults receive support from family members (67.5%) when using digital tools. A smaller percentage rely on professionals or experts (10.8%), while 3.3% turn to friends for help. In particular, 18.3% of respondents said they had not received any support. This suggests that older adults usually have access to some form of care and that family members play the most important role in helping them navigate digital technologies.

If you had the opportunity to attend a course to improve your digital skills, what format would you prefer?

The data shows that the type of course preferred by seniors is face-to-face group lessons (78.3%). Many seniors still value face-to-face interaction during learning, in addition to the willingness to be followed step by step.

How important do you find improving your digital skills?

According to the data, half of the participants believe it is very important to improve their own digital skills, the 42.5% consider it moderately important and the 7.5% unimportant. None of the interviewees thought it was not important at all. This indicates a strong general acknowledgment of the value and importance of improving digital skills.

How much time are you willing to dedicate to improving your digital skills?

The survey results show that most respondents are willing to invest a moderate amount of time in developing their digital skills, 1 - 2 hours per week (62%). These findings suggest

that while most individuals recognize the importance of digital skills, they prefer to spend their time in more familiar activities.

What is the main motivation driving you to improve your digital skills?

The survey results reveal that the majority of respondents are mainly motivated by the desire to better manage their personal interests and hobbies (47.1%) and their daily activities (reading and writing emails, making doctor's appointments, sharing photos of grandchildren) for 46.3%. These results highlight the desire to improve one's daily life in all its aspects. Communication with one's family members and work and professional needs come last with 3.3% each.

Summary of findings

The combined results of the focus groups and questionnaires highlight the main challenges and needs of older people in relation to digital technology. The participants are all retired and come from different professional backgrounds.
Most participants reported difficulties in technical knowledge, in understanding English and in the frequent interface changes. Many relied on the support of family members, which sometimes led to a sense of dependence and frustration. Emotional responses include: anxiety, anger, confusion and fear of making mistakes, but also pride and increased confidence when they are successful on their own.
Regarding learning preferences, participants emphasized the need for clear and detailed guidance and a teacher to follow them step by step with visual aids and repetitions. Small group courses were appreciated for peer support, while many also expressed the need for individual help. Practical skills —such as messaging, online banking and form filling— were considered the most relevant and useful topics.
Despite the difficulties, most participants expressed a strong motivation to learn, saying that communicating with family and friends is the main reason why they would like to improve digital skills. Furthermore, they are motivated by the desire to simplify daily activities, while only a small part mentioned personal interests. This indicates that social connection and daily functionality are the main drivers of engagement. As for the time, participants are willing to dedicate no more than two hours a week.
It appears that seniors consider digital skills essential to maintain independence, trust and social inclusion in everyday life.

5. Organisations' Findings

General Information

Four organizations were invited to take part in the questionnaire aimed at gathering information on their experiences and practices relating to adult education and digital inclusion. All participating organizations are actively involved in adult education, with a strong focus on supporting students with fewer opportunities, including seniors. Their contribution has provided valuable perspectives on the challenges faced by educators and on effective approaches to digital skills training.

Organisations' Questionnaires & Focus Groups Findings

What is the primary objective of your organization?

All the organisations (100%) main objective is to provide educational support and further education. Half of these organizations have also chosen to offer technological services and the other half sees promotion of social inclusion as one of their main objectives.

What types of services do you offer to adults and seniors?

All participants (100%) offer digital skills training and technical support as their core services. 75% provide technological assistance, 25% also provide social support and other services. This emphasizes an approach to help adults and older people develop their digital skills through structured learning programs.

How many seniors or adults do you assist on average per year?

The scale of support varies, most organizations operate on a small to medium scale, allowing for potentially more personalized and targeted assistance. Half of the organisations assist fewer than 50 people per year, while the other 2 between 50 and 100 people per year. None of those interviewed declared that they assist more than 500 people per year.

What are the main challenges seniors report when using technology?

The main challenges reported are the lack of technical knowledge, the fear of making mistakes, the fear of complexity and the language barriers. Interestingly, high costs or lack of interest were not identified as significant barriers. These insights suggest that the difficulties older adults experience are more emotional and cognitive, rather than financial,

emphasizing the need for supportive, step-by-step learning environments that build trust and reduce anxiety.

How does your organization address these challenges?

The organizations focus primarily on organizing group courses and in providing individual training in order to offer more personalized support. Only two organizations also offer on-demand technical support or other services. This combination of group and individual learning helps create a supportive environment that meets different learning needs and strengthens trust among seniors.

What resources do you use to support seniors in learning digital skills?

All the organizations indicated as primary resources: printed guides and hands-on lessons. Only one organization uses video tutorials. This shows that older people prefer simple and clear materials that are easy to follow.

If you collaborate with other organizations or entities to improve your services, could you specify how?

All interviewees collaborate with other organizations and entities to improve their service. This highlights that creating a territorial network is essential for interviewees to provide more effective services.

Do you believe there are gaps in the currently available resources to assist seniors?

Respondents do not believe there are gaps in the resources currently available to help older people learn digital skills. This indicates a general perception that no other elements are needed to better support older adults in overcoming digital challenges.
This anomalous result highlights a difficulty on the part of some organizations in perceiving the real needs of the elderly. Therefore, the data collection carried out among those over 65 for the Generation Infinity project is even more relevant.

What are the main training needs you observe among seniors?

Organizations report that seniors have training needs across all levels of digital skills. Basic skills, such as navigating devices and using email, are needed by 100% of participants. At the same time, advanced skills, including the use of banking applications and understanding online security, are also seen as essential by 100%. This highlights that older adults require comprehensive digital education, from the basic knowledge to the more complex one, in addition to practical tasks relevant to everyday life.

What type of support could enhance your work with seniors?

To improve their work with seniors, organizations have identified several key areas of support. Financing was the most mentioned need followed by access to digital tools. No one expressed the need to train employees to better equip staff working with the elderly, which suggests that the focus is more on implementing equipment already in possession and financial resources.

How important do you think technology is in improving the quality of life for seniors?

The organizations all consider technology as a key factor in improving the quality of life of the elderly. None of the participants rated it as slightly or unimportant. These data reflect the strong belief that digital inclusion plays a crucial role in promoting independence, social connection and access to essential services for older people.

Would you be interested in collaborating on training programs specifically for seniors?

All respondents (100%) expressed a clear interest in collaborating on training programs specifically designed for seniors. This response highlights a strong willingness among organizations to work together in improving digital inclusion and developing tailored educational initiatives that address the unique needs of older adults.

What changes or improvements would you suggest to make digital services more accessible to seniors?

To improve the accessibility of digital services for seniors, organizations have suggested several practical and user-centric changes:
• Large icons, high contrast and adjustable font size to make interfaces more readable and visually accessible.
• Minimalist design with a focus on clarity and removal of unnecessary information.
• Clear navigation and fewer steps to achieve essential functions such as “Send,” “Save,” or “Back,” reducing cognitive load and frustration.
• Printed guides and videos specifically adapted for seniors, featuring large print, visual instructions and a slower learning pace.
• Step-by-step educational videos in Italian to support independent understanding and learning and make the material more usable.
In addition, respondents stressed the importance of involving seniors in the development and testing of digital services. Involving older people in the design process and incorporating their feedback would help ensure that the final solutions truly meet their needs and preferences.

Furthermore, it is suggested that the teaching methodology should be as practice-based as possible, in this way the participants have the possibility to try and make mistakes if necessary.
These suggestions reflect a strong desire to create inclusive, user-friendly digital environments that empower older adults and reduce barriers to participating in the digital world.

Summary of findings

The organizations participating to the survey focus mainly on providing educational support through group courses and individual training, sometimes offering additional technological services. Every year they assist a variable number of elderly people, none of them exceeding 100 people.
To improve digital accessibility for seniors, organizations recommend larger icons, adjustable font size, high contrast, minimalist design, and clearer navigation with fewer clicks to achieve key features. They also highlight the importance of involving older people in the design and the testing of digital tools, to ensure that solutions truly meet their needs. They recommend using practical teaching methodology as much as possible. Existing teaching materials often do not meet the needs of the elderly; they tend to be too hectic, use technical jargon or are in foreign languages, which causes confusion. There is also a lack of practical, everyday examples and accessible materials for practicing after the workshops, such as guides in large print and videos in Italian.
Overall, most organizations recognize technology as an important factor in improving the quality of life of seniors and express a strong willingness to collaborate in the development and delivery of training programs specifically designed for this group.

An in-depth analysis of the survey results highlighted important challenges, needs and motivations of older people regarding digital skills.

The main motivation for improving digital skills was communication with family and friends, followed by simplification of daily activities. Personal interests and professional reasons were less commonly mentioned. Most participants were willing to devote 1 or 2 hours a week to learning, which indicates a certain desire to acquire new knowledge.
The main challenges older adults face when using technology include a lack of technical knowledge, concern for online safety, fear of making mistakes, and the perceived complexity of devices and applications. Emotional barriers such as confusion and anxiety are common, but effective independent use leads to feelings of pride and increased confidence.
Seniors prefer learning environments that offer clear, step-by-step instructions in Italian, supported by visual materials and repetitions. Small group workshops and individual support are highly appreciated. Practical skills —such as messaging, online banking and

form filling— are considered the most relevant. In addition to basic skills, there is a strong demand for advanced knowledge related to app usage and online security.

6. References & Annexes

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https://www.auditel.it/wp-content/uploads/2025/05/Auditel_conferenza_ipsos_Slide_DEF.pdf

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https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Skills_for_the_digital_age

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https://www.istat.it/it/files/2023/12/Cittadini-e-ICT-2023.pdf

Annexes

Focus Group

https://drive.google.com/drive/folders/1Z_g28AUnmlzX-p9JozEHtjC794Y1jBzQ

Questionnaire

https://drive.google.com/drive/folders/1oUy0tX7Q8r7veF-FutkEcdpI95LPbJj9

D. COUNTRY CASE STUDY: POLAND

Authors: Fundacja "Fundusz Inicjatyw", Poland

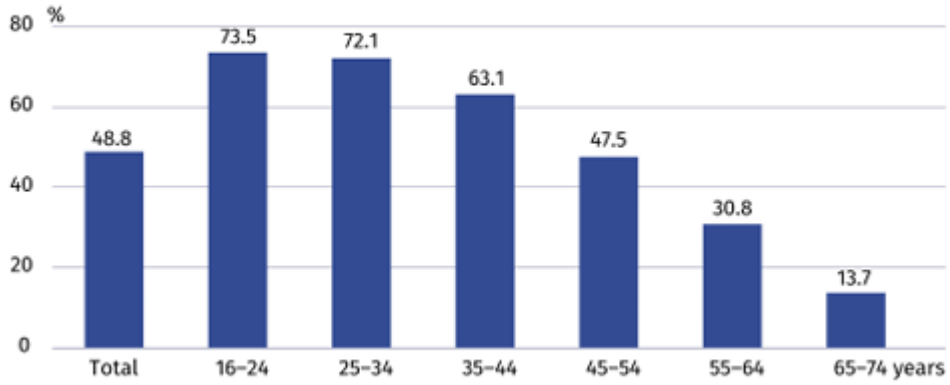
Polish research findings

1. Current situation of seniors regarding digital readiness, digital safety and digital skills of seniors

Poland continues to face significant challenges in improving digital readiness and skills among its senior population. According to data from Statistics Poland, as of 2021, only around **10% of adults aged 65–74** possessed basic or above-basic digital skills—well below the EU average of 16% for this age group. Although general internet use among Polish seniors is gradually increasing, the gap remains substantial: in 2020, only about **43% of seniors** were internet users. Recent statistics show that across the broader adult population (aged 16–74), only **48.8% have at least basic digital skills**, still below the EU average of 55.6%. While digital literacy is increasing — as evidenced by the rise in basic digital skills among individuals aged 65–74 to 13.7% in 2024 — this also highlights a broader national issue in digital competency, which is exacerbated by age and rural-urban divides (Statistics Poland).

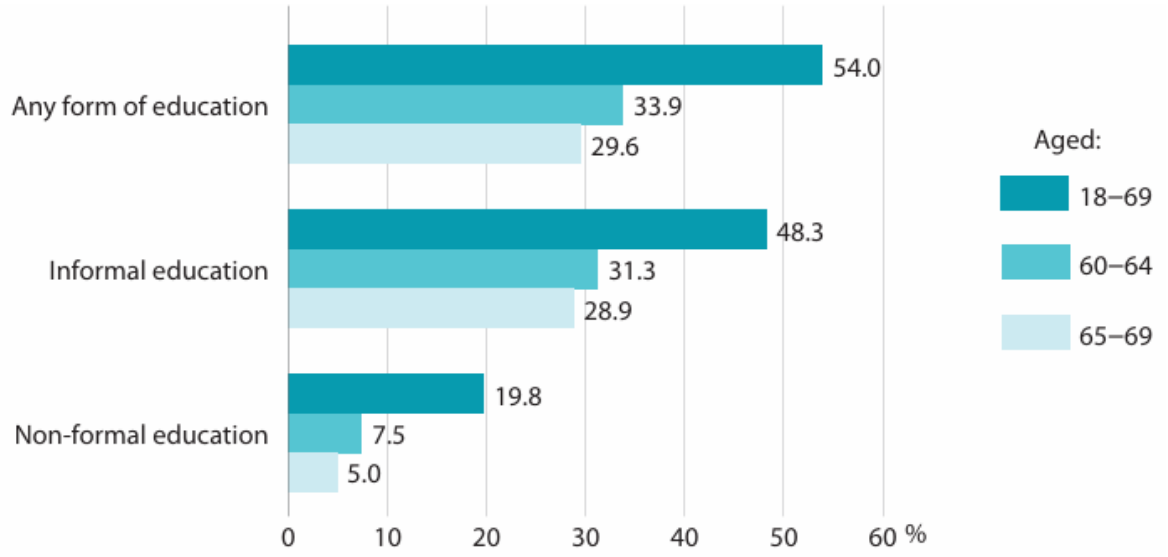
Individuals with basic or above basic digital skills (2024, Statistics Poland)

Chart 4. Individuals with basic or above basic digital skills



Access to digital infrastructure also differs significantly depending on region. While around **90% of urban households** have internet access, this drops to about **71% in rural areas**. Among the elderly—especially those aged 75 and above in small towns and villages—digital exclusion remains extremely high, with between **70% and 98% having no digital engagement** at all, according to a study in the journal MDPI. Such disparities underscore a deepening digital divide, where older adults living in rural areas experience a compounded lack of skills, infrastructure, and tailored educational programs.

The share of persons participating in various forms of education in the total population of a given age group by forms of educationa in 2022 (Statistics Poland)



a One person may be recorded more than once if this person declared participation in various forms of education.

Despite these challenges, Poland has begun implementing national frameworks aimed at promoting digital inclusion. The Digital Competence Development Programme 2020-2030 outlines strategic goals to improve digital skills across all life stages, including older adults. The importance of online safety and awareness for vulnerable populations, including seniors is further emphasized by the Polish Digitization Strategy 2025–2026, which outlines major investments in cybersecurity and digital infrastructure, emphasizing cloud adoption, AI use, and digital skills for 85% of the population. These priorities align with the European Digital Competence Framework (DigComp) and support broader goals under the EU's Digital Decade. These strategies align with the European Digital Competence Framework (DigComp) and form part of broader efforts under the EU's Digital Decade.

At the community level, numerous initiatives and organizations are working to address digital exclusion among older citizens. The widespread network of **Universities of the Third Age (U3A)** in Poland plays a crucial role in providing lifelong learning opportunities,

with many centers—including in Wrocław and Kraków—offering courses on digital skills, online communication, and cybersecurity. The city of Wrocław has also implemented age-friendly services, including a **Senior Council** and digital training workshops (The Guardian, 2024).

Recent targeted interventions have further supported senior digital inclusion. For example, the REMEDIS project, conducted in 2024, piloted digital and media literacy workshops for seniors and caregivers, highlighting the lack of structured digital education within existing senior education frameworks. Another notable effort, the EEA Grants-funded project "E-inclusion of Senior Citizens" (2018–2020), delivered tailored digital skills training to seniors in rural municipalities and created networks of volunteer mentors to assist with digital learning. This project also involved adapting local public services to be more accessible for older adults.

Despite the existence of national strategies and localized programs, a large portion of Poland's elderly population remains digitally excluded. There is a pressing need to scale successful pilot initiatives and ensure they reach rural areas and the most vulnerable age groups. Continued coordination between national authorities, municipalities, NGOs, and EU-supported projects will be essential to closing the digital gap for seniors in Poland.

2. Main Challenges

The main challenges faced by seniors in Poland regarding digital education and capabilities are well documented across national and EU reports, as well as supported by findings from surveys, focus groups, and expert observations. Seniors struggle with both access and skills, particularly in rural areas, and often lack the support systems needed for effective digital learning. Psychological barriers such as fear of technology, low

confidence, and anxiety about online risks further contribute to digital exclusion. Common technical tasks—like setting up devices or using e-services—can be overwhelming without hands-on guidance. These issues are compounded by affordability concerns and limited access to tailored, ongoing education programs.

Key challenges include:

- **Low or very limited digital skills** among older adults, especially 65+
- **Lack of awareness and confidence regarding online safety**, scams, and cyber hygiene
- **Limited exposure to technology**, leading to struggles with basic devices and interfaces
- **Fear of making mistakes** or damaging devices, causing avoidance behavior
- **Overwhelming design of digital tools** (pop-ups, small fonts, unclear layouts)
- **Lack of access to personalized training**, especially in rural and small-town areas
- **Dependence on family support** instead of formal, structured learning options
- **Physical and cognitive barriers** (e.g., vision issues, dexterity, fatigue)
- **High cost of devices and internet**, limiting ownership and motivation
- **Need for repetitive, slow-paced learning** not always available in current programs
- **Low motivation among some seniors**, often due to the belief that digital skills are unnecessary

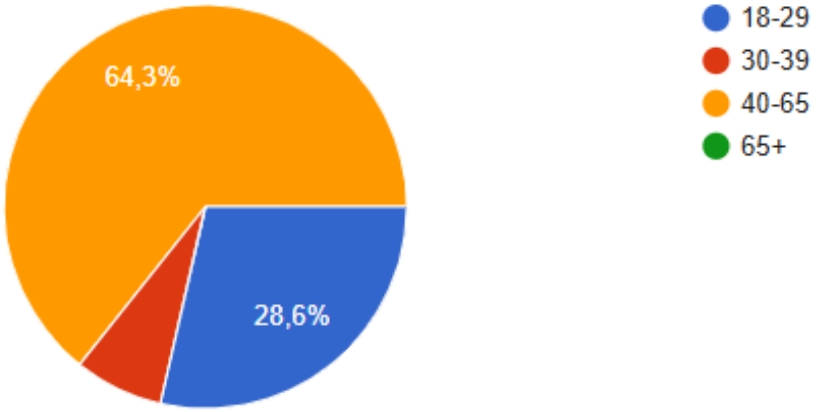
3. Trainers' Findings

General Information

A total of 14 trainers participated in the questionnaire. The summaries of their answers can be found below:

- **Age**

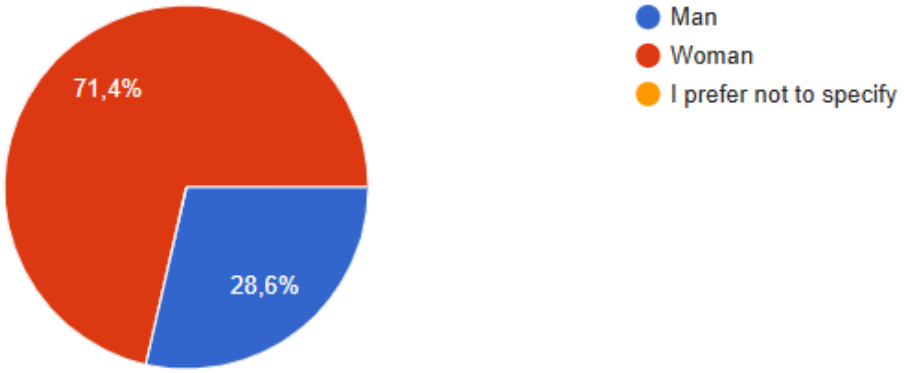
14 Replies



The majority of participants fell within the 40–65 age group (9, 64%), followed by younger adults aged 18–29 (4, 29%). Only one respondent (7%) was in the 30–39 range, and none were aged 65 or older.

- **Gender**

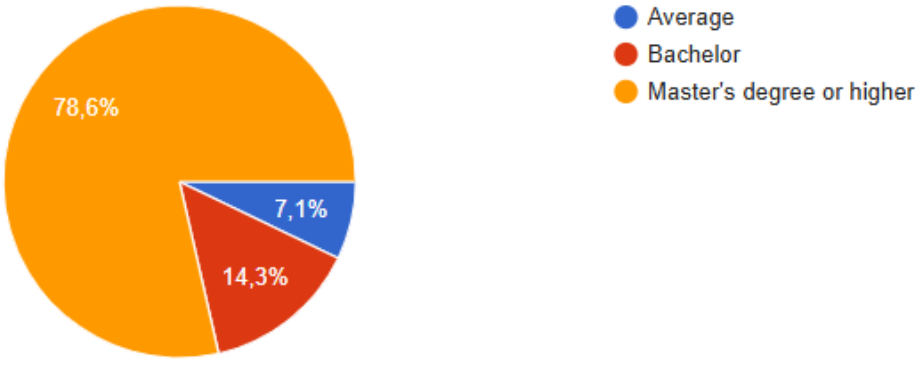
14 Replies



In terms of gender, most respondents identified as female (10, 71%), while 4 participants (29%) identified as male. No respondents chose to withhold their gender.

- **Education**

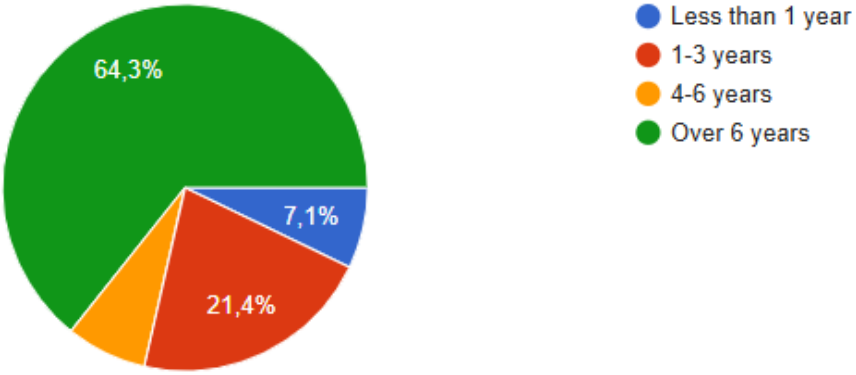
14 Replies



When asked about their educational background, the vast majority of respondents (11, 79%) reported having a master's degree or higher. Two participants (14%) held a bachelor's degree, while only one respondent (7%) had a high school diploma.

- **How many years of experience do you have in training or teaching?**

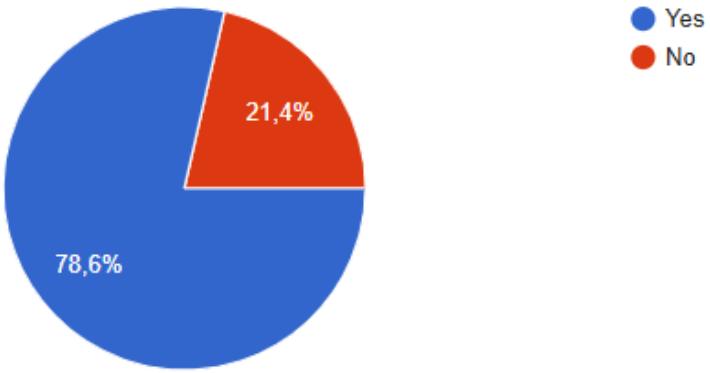
14 Replies



Regarding their experience in training or teaching, most respondents (9, 64%) reported having more than 6 years of experience. A smaller number had between 1 and 3 years (3, 21%), with one respondent each indicating less than 1 year and 4–6 years of experience (7% each).

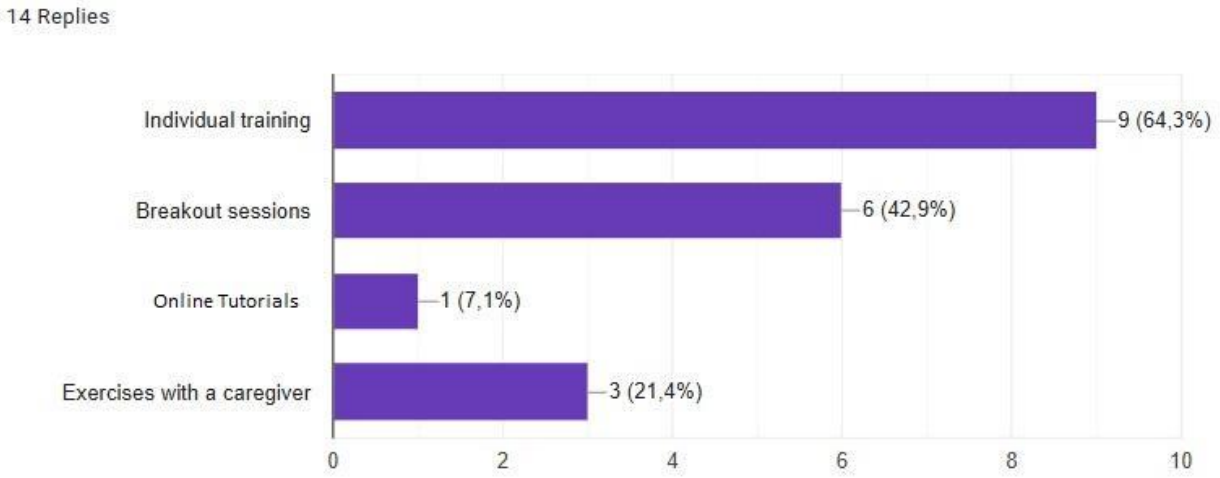
- **Have you ever provided training specifically on digital skills for older adults?**

14 Replies



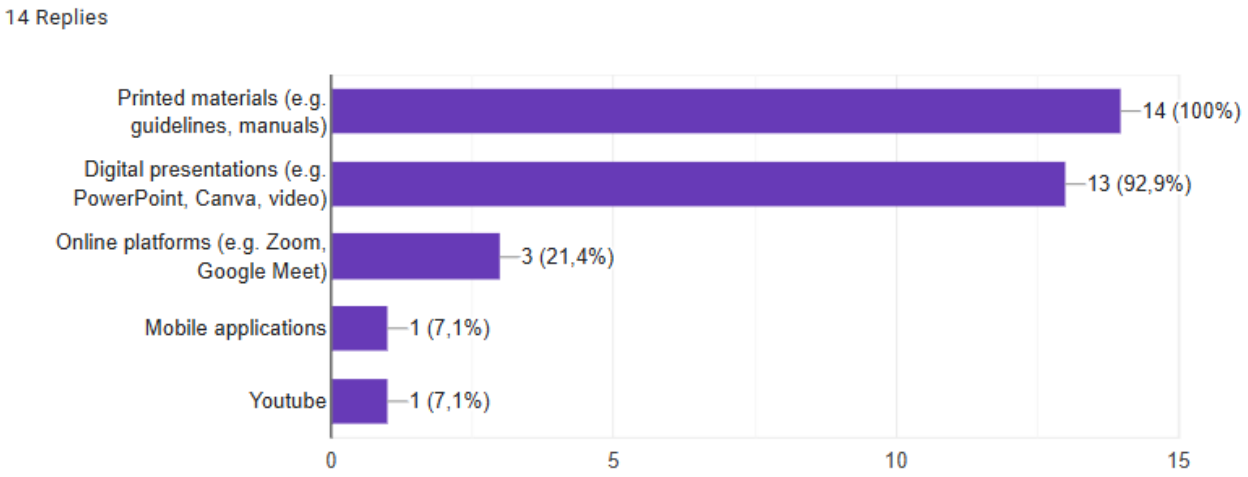
When asked about their experience providing digital skills training specifically for older adults, most respondents (11, 79%) confirmed they have done so, while 3 participants (21%) have not.

- **What teaching methods do you currently use for digital skills training? (Select all that apply):**



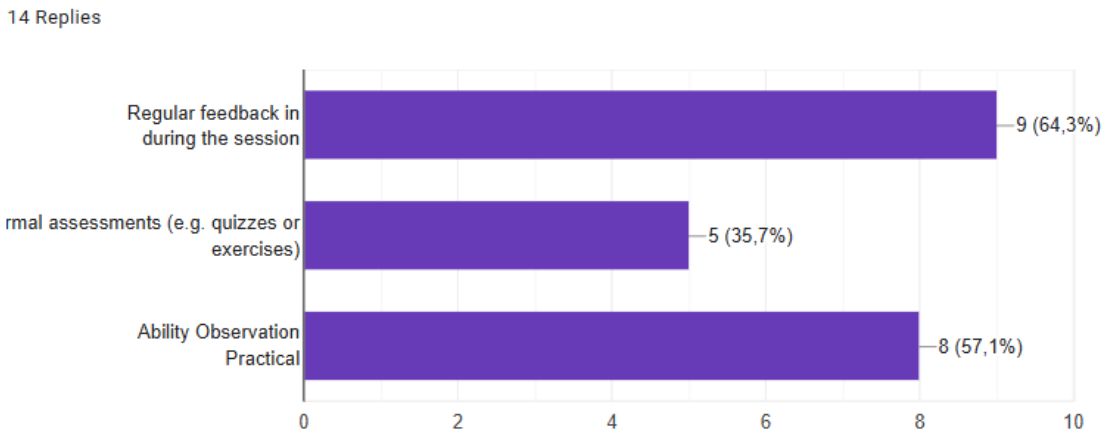
Regarding teaching methods used in digital skills training, individual training was the most common approach, reported by 9 respondents (64%). Group sessions were also popular, with 6 participants (43%) using this method. Guided practice was employed by 3 respondents (21%), while only 1 person (7%) used online tutorials. No other methods were reported.

- **What resources or tools do you use during your training sessions? (Select all that apply):**



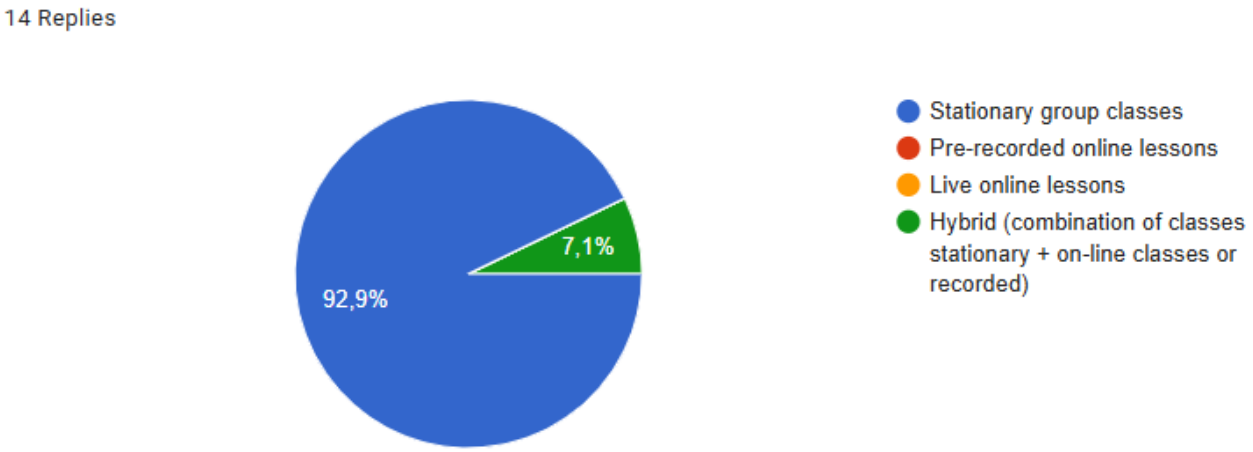
When asked about the resources and tools used during training sessions, printed materials like guidelines and textbooks were the most common, utilized by 14 respondents (100%). Digital presentations such as PowerPoint, Canva, and videos were nearly as popular, with 13 participants (93%) using them. Online platforms like Zoom or Google Meet were used by 3 respondents (21%), while mobile apps and other resources like YouTube were each mentioned by 1 person (7%).

- **How do you evaluate the progress of older adults in learning digital skills?**



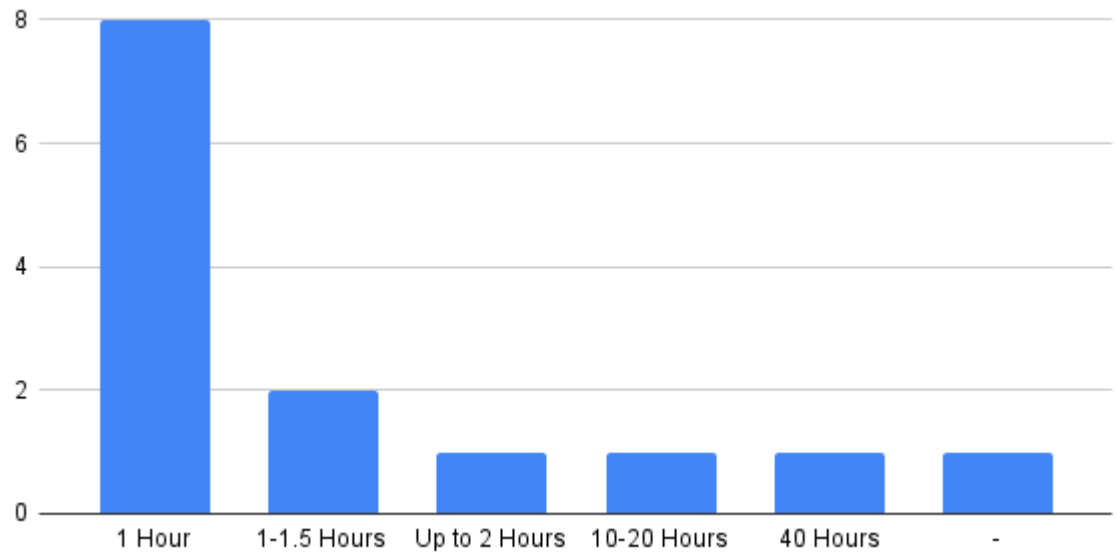
When it comes to evaluating the progress of older adults learning digital skills, the most common method was providing regular feedback during sessions, used by 9 respondents (64%). Observation of practical skills was also frequently employed by 8 participants (57%), while formal evaluations like quizzes or exercises were used by 5 respondents (36%).

- **From your experience which is the most appropriate format for the adults and seniors:**



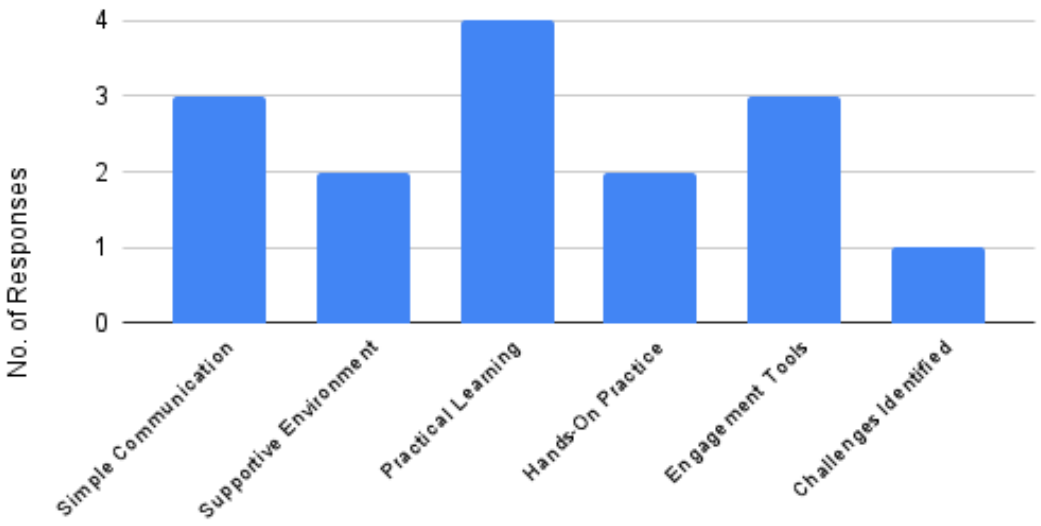
Based on their experience, most respondents (13, 93%) believe that group lessons held in person are the most appropriate format for adults and seniors. Live online lessons were favored by just one participant (7%), while none selected pre-recorded online lessons. Hybrid formats combining in-person and online elements were not chosen by anyone.

- **Could you recommend the duration of training? (how many hours).**



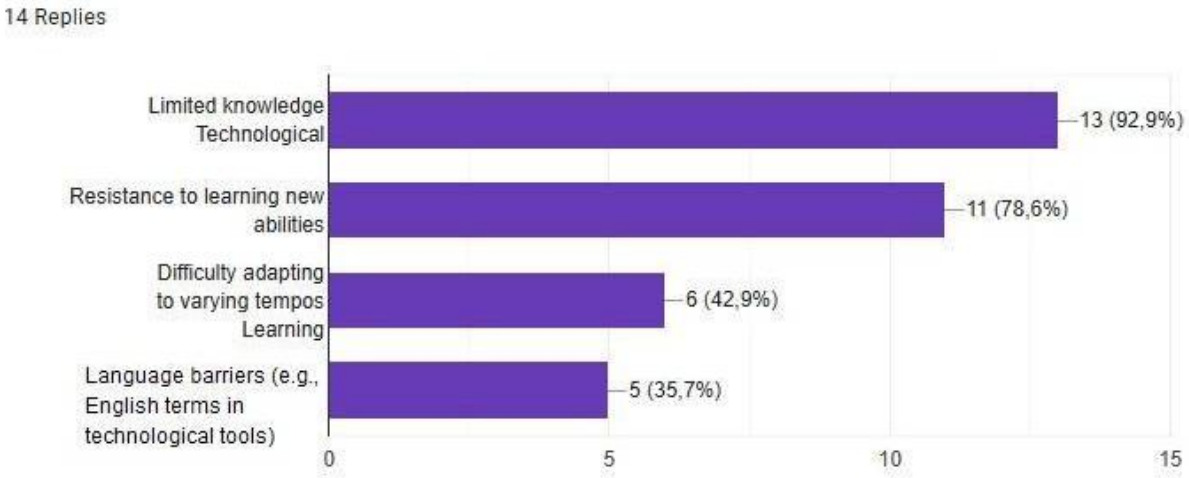
When asked about the recommended duration for digital skills training, most respondents suggested shorter sessions, with 8 recommending 1-hour lessons and 2 preferring 1 to 1.5 hours. One participant suggested sessions up to 2 hours. A few recommended much longer durations, including 1 respondent each suggesting 10–20 hours and even 40 hours of training.

- **Do you have any recommendations concerning needs, methodology or tools?**



In terms of additional recommendations related to needs, methodology, and tools, respondents emphasized several key themes. Practical learning was highlighted by 4 participants, while simple communication and engagement tools were each mentioned by 3 respondents. A supportive environment and hands-on practice were noted by 2 participants each. One respondent pointed out the importance of addressing challenges directly.

- **What are the main challenges you encounter when teaching digital skills to older adults? (Select all that apply):**



When describing the main challenges faced while teaching digital skills to older adults, limited technological knowledge was the most frequently mentioned issue, reported by 13 respondents. Resistance to learning new skills was also a significant challenge, noted by 11 participants. Additionally, difficulty adapting to different learning paces and language barriers, such as English terms in tech tools, were reported by 6 and 5 respondents respectively.

Findings by the Focus groups

Three focus groups were conducted with digital skills educators and trainers between March and April 2025. Each group consisted of 3 trainers/educators. Trainers shared their experiences, methods, and challenges in teaching older adults, based on both group and individual training settings.

Main challenges when teaching seniors:

- Wide variation in skill levels, from highly proficient to complete beginners.
- Strong fear of technology—especially fear of doing something wrong or harmful.

- Seniors often lack early exposure to technology and struggle with basic tools (e.g., mouse, keyboard).
- Some participants are resistant to learning due to low motivation or external dependence (e.g., help from family).
- Anxiety about cybersecurity risks and scams.
- Physical limitations (vision, dexterity) and cognitive fatigue during long sessions.

Effective strategies and methods:

- **Individual approach** is essential – small groups or 1-on-1 training preferred.
- **Hands-on practice** is critical; theory alone is insufficient.
- **Real-life, practical tasks** increase engagement (e.g., paying bills, sending emails).
- Use of **step-by-step instructions**, **visuals**, and **printed guides** for recall.
- **Repetition** and **slow pacing** tailored to the learner's capabilities.
- Incorporating **games**, **quizzes**, and **story-based learning** to reduce stress.
- Encouragement and building confidence are key to participation and progress.

Tools and resources:

- **Simulated environments** (e.g., bank demo sites) for safe practice.
- **Customized materials** using large fonts, simple layouts, and clear instructions.
- **Personal devices** (rather than borrowed ones) to build familiarity.
- **Short manuals**, **task guides**, and **visual aids** during and after training.
- Proposals for a simplified "senior mode" in apps to make them more accessible.

Summary

The main difficulties and challenges include:

- Limited or lack of technological knowledge
- Fear of making mistakes or damaging the device
- Resistance to learning or relying on others for tech tasks
- Difficulty adapting to varied skill levels and learning paces
- Language barriers (e.g., English in apps/tools)
- Low motivation and anxiety about cybersecurity and scams
- Physical limitations (vision, dexterity) and cognitive fatigue
- Only online training is not effective for beginners

Effective teaching methods and strategies include:

- Individual approach or small groups preferred
- Learning by practical, real-life tasks (e.g., sending emails)
- Step-by-step instructions and repetition are essential
- Printed guides and visual materials help with memory
- Slow pacing, personal attention, and building confidence
- Games and storytelling reduce stress and support learning
- Learners take handwritten notes for home practice

Resources used:

All trainers use printed materials (100%) and digital presentations (93%) such as PowerPoint, Canva, and videos. Online platforms (e.g., Zoom, Google Meet) are used by 21%, while mobile apps and YouTube are used less frequently (7%).

Focus group participants emphasized the **importance of customized materials**—large fonts, simple layouts, and visual aids—and using learners' personal devices to increase familiarity and confidence.

Simulated environments (e.g., demo banking sites) were seen as helpful for practicing safely.

Writing down instructions during training helps adults remember the steps at home.

Recommendations:

Training should be delivered in small, supportive groups or individually, with step-by-step guidance, repetition, and slow pacing tailored to each learner.

Short, structured sessions of around **1–1.5 hours are preferred** to avoid fatigue, ideally 2–3 times per week.

Activities should follow a clear structure: introduction of a task, guided repetition with the trainer, and individual practice.

Trainers recommend using practical tasks and **relatable examples** to keep seniors engaged. Encouragement, dialogue, and patient instruction help build trust and motivation. The ideal program length is 4 weeks for beginners and up to 8 weeks for more advanced learners. A patient, empathetic trainer is considered essential to success.

4. Seniors' Findings

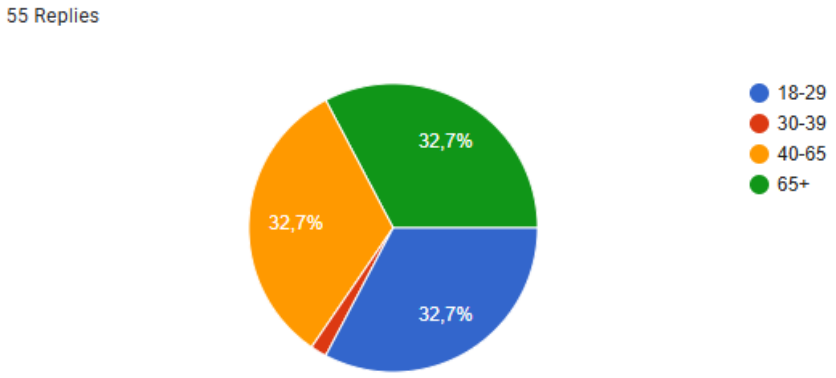
General Information

A total of 55 participants answered the questionnaire:

Seniors' Questionnaires & Focus Groups Findings

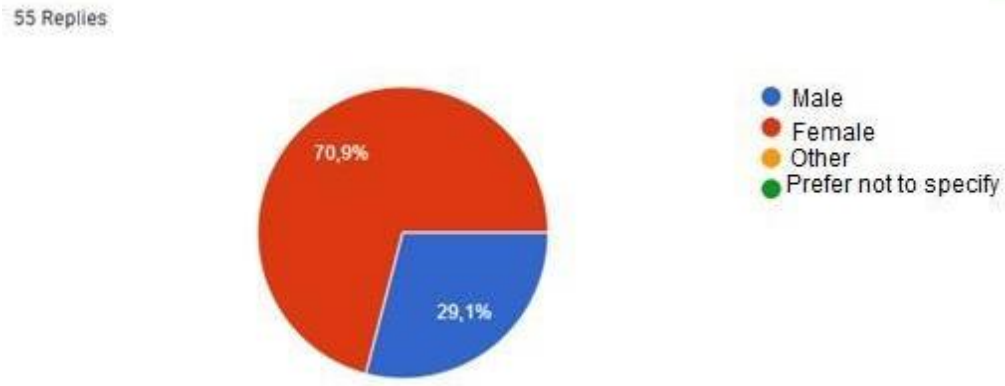
55 responses

- **Age**



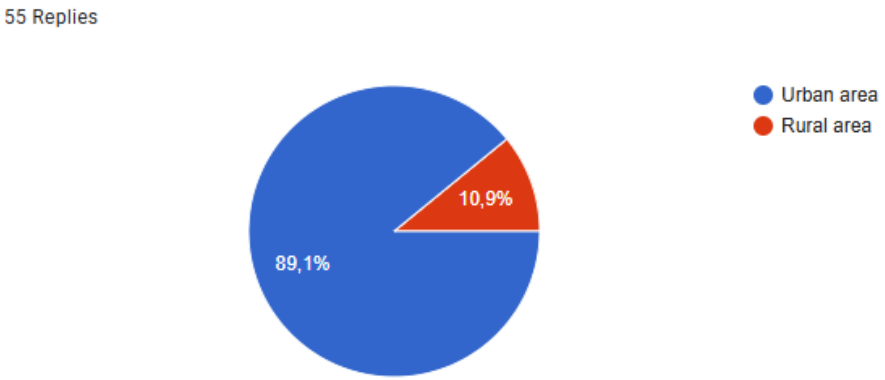
The respondents' ages are distributed as follows: 18-29 (18, 33%), 30-39 (1, 2%), 40-65 (18, 33%), and 65+ (18, 33%). Most participants fall evenly into the youngest, middle, and oldest age groups, while the 30-39 group is much smaller.

- **Gender**



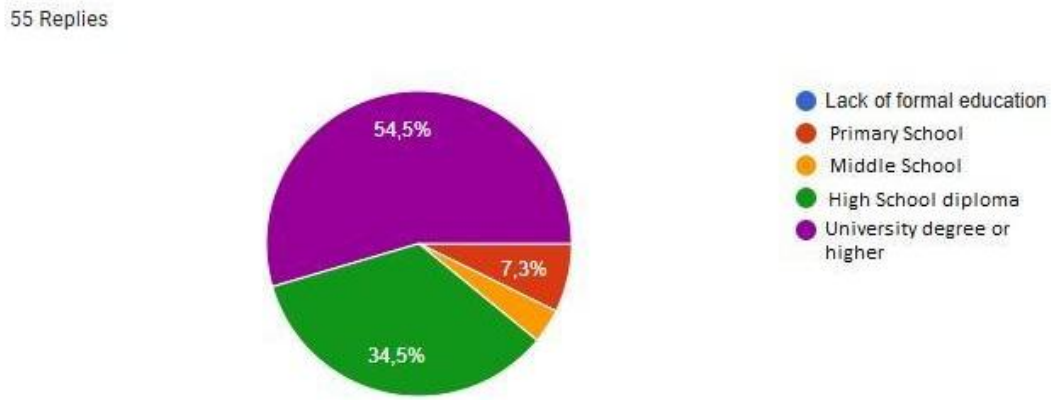
The gender breakdown of respondents is: Male (16, 29%), Female (39, 71%), Other (0, 0%), and Prefer not to specify (0, 0%). The majority of participants are female, with males making up less than a third of respondents.

- **Place of residence**



Most respondents live in urban areas (49, 89%), while a smaller portion reside in rural areas (6, 11%).

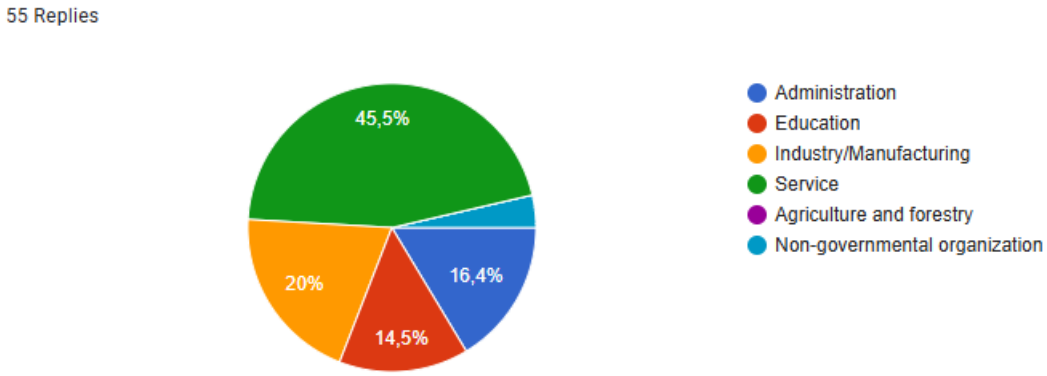
- **Level of education:**



The education levels of respondents are distributed as follows: No formal education (0, 0%), Primary school (4, 7%), Middle school (2, 4%), High school diploma (19, 35%), and University

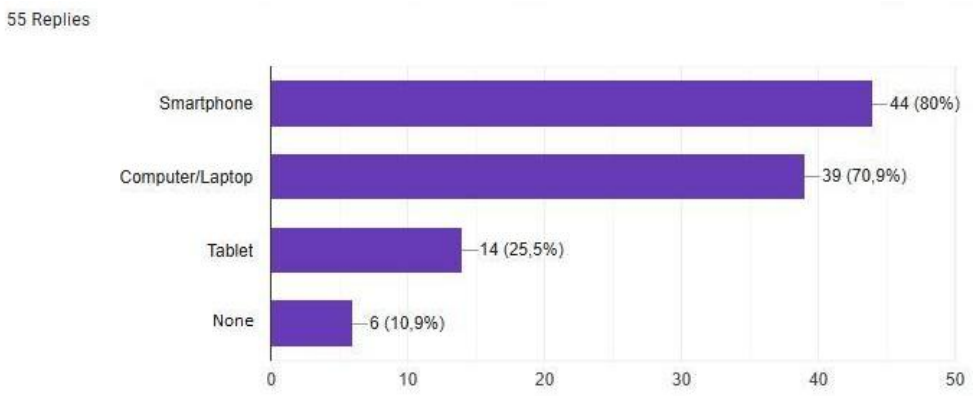
degree or higher (30, 55%). Most participants have a university degree or higher, followed by those with a high school diploma.

- **Previous work area**



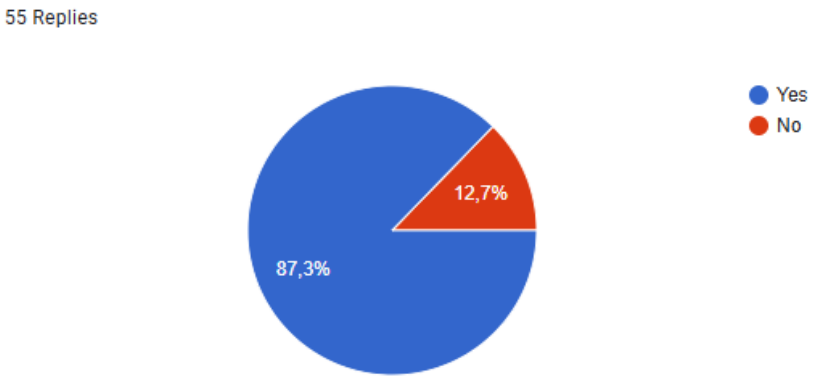
Respondents' previous occupations are varied: Administration (9, 16%), Education (8, 15%), Industry/Manufacturing (11, 20%), Services (25, 45%), Agriculture and forestry (0, 0%), and NGO (2, 4%). The majority have worked in the Services sector, with Industry and Administration also well represented.

- **Which digital devices do you own? (multiple answers possible)**



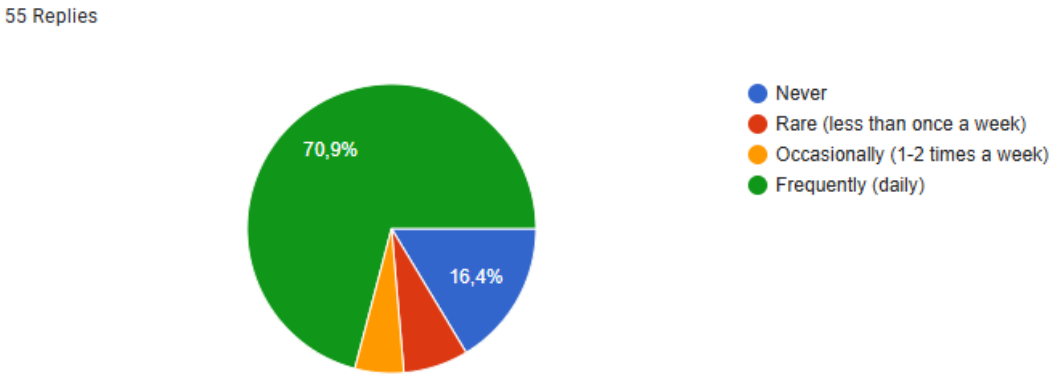
When asked about digital device ownership, most respondents reported having a smartphone (44, 80%) and a computer or laptop (39, 71%). Tablets were less common, with 14 people (25%) owning one, while a small group of 6 respondents (11%) indicated they do not own any digital devices.

- **Do you have access to the internet at home?**



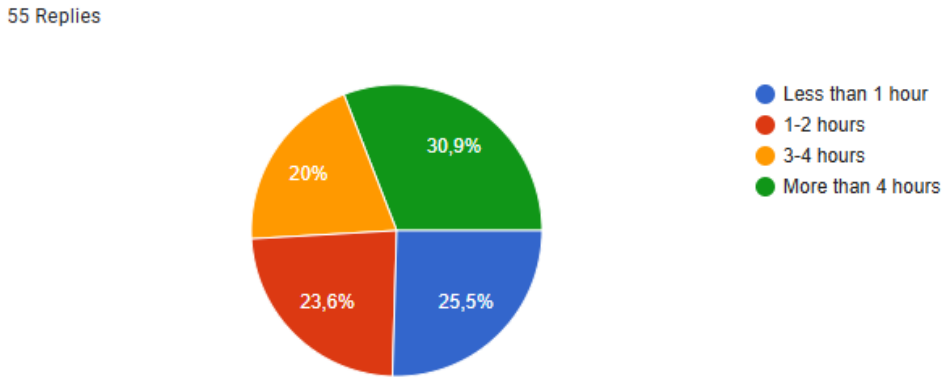
When asked about internet access at home, the vast majority of respondents (48, 87%) confirmed they have access, while a smaller portion (7, 13%) do not.

- **How often do you use the internet? (Internet refers to any activity that requires a connection, such as browsing websites, sending emails, using social media, or sending messages via WhatsApp.)**



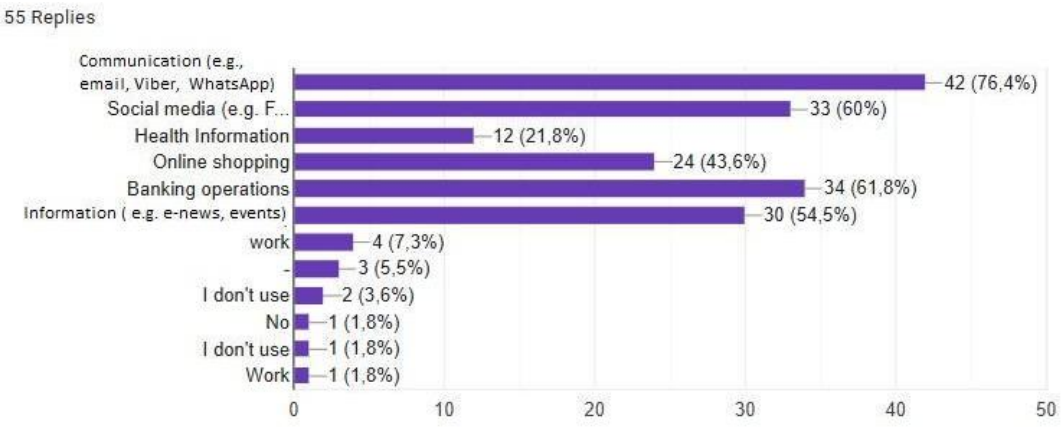
When asked about internet usage frequency, most respondents (39, 71%) reported using the internet frequently, meaning every day. A smaller number use it occasionally (3, 5%), or rarely (4, 7%), while 9 respondents (16%) said they never use the internet.

- **How many hours a day do you use digital communication tools?**



When asked about daily use of digital communication tools, responses were fairly spread out. Seventeen respondents (31%) use these tools for more than 4 hours a day, while 14 (25%) use them less than an hour. Those using them for 1-2 hours (13, 24%) and 3-4 hours (11, 20%) also make up significant portions of the group.

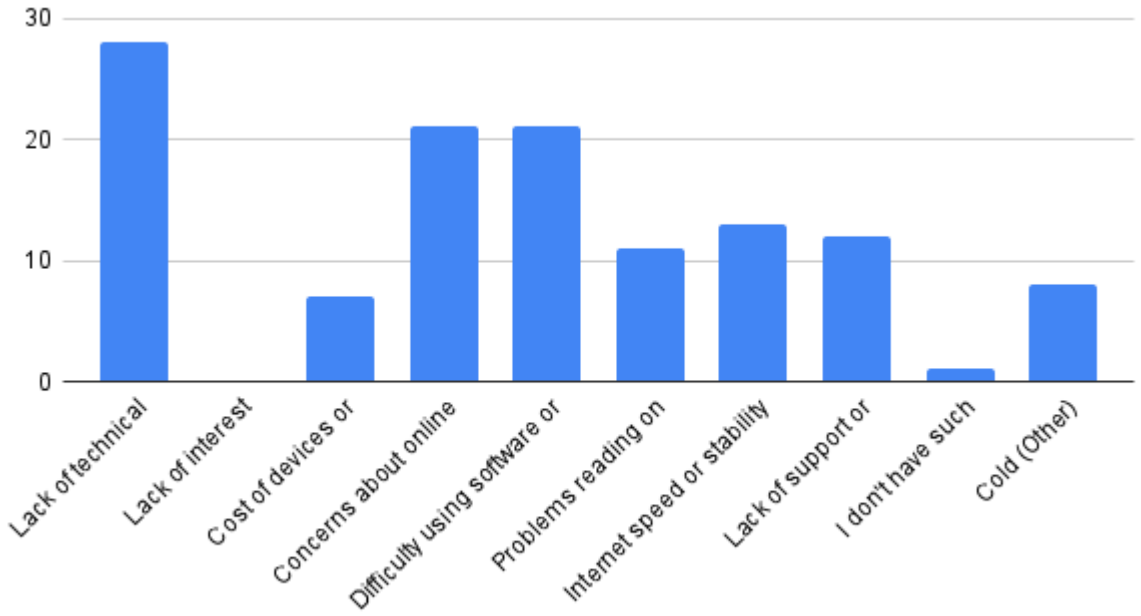
- **For what purposes do you use technology? (Select all applicable options):**



When asked about the purposes for which they use technology, communication apps like email, Viber, and WhatsApp topped the list, with 42 respondents (76%) using them. Banking

operations (34, 62%) and social media platforms such as Facebook and Instagram (33, 60%) were also popular. Many people use technology for accessing information like e-news and events (30, 55%) and online shopping (24, 44%). Health information was a purpose for 12 respondents (22%), while a small number mentioned work-related uses (5, 9%) or said they don't use technology at all (7, 13%).

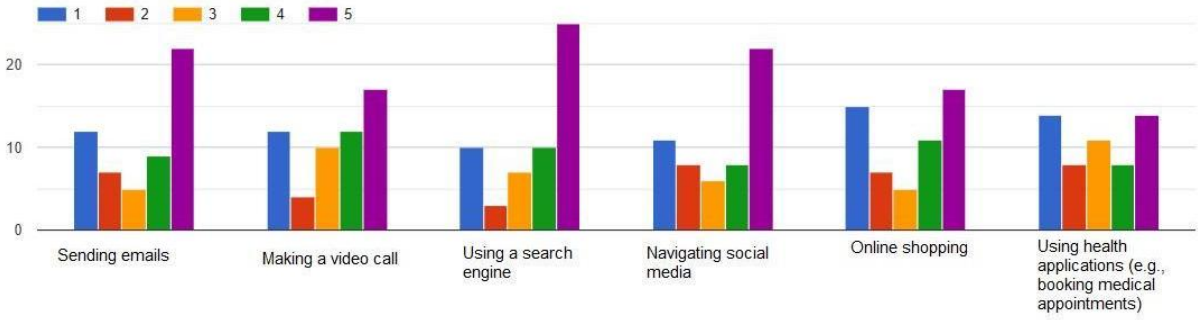
- **What are the main difficulties you face when using technology? (Select all applicable options):**



When asked about the main difficulties faced in using technology, a lack of technical knowledge was the most common challenge, reported by 28 respondents (51%). Concerns about online security and difficulty using software or applications were also significant issues, each mentioned by 21 people (38%). Other notable difficulties included internet speed or stability issues (13, 24%) and problems reading on small screens like smartphones (11, 20%).

Cost of devices or internet access affected 7 respondents (13%), while a few mentioned other challenges like cold weather (8, 15%) or lack of support from others (2, 4%). Only one respondent (2%) reported having no difficulties.

- **How competent do you feel in these activities? (Scale: 1 = Not at all, 5 = Very)**

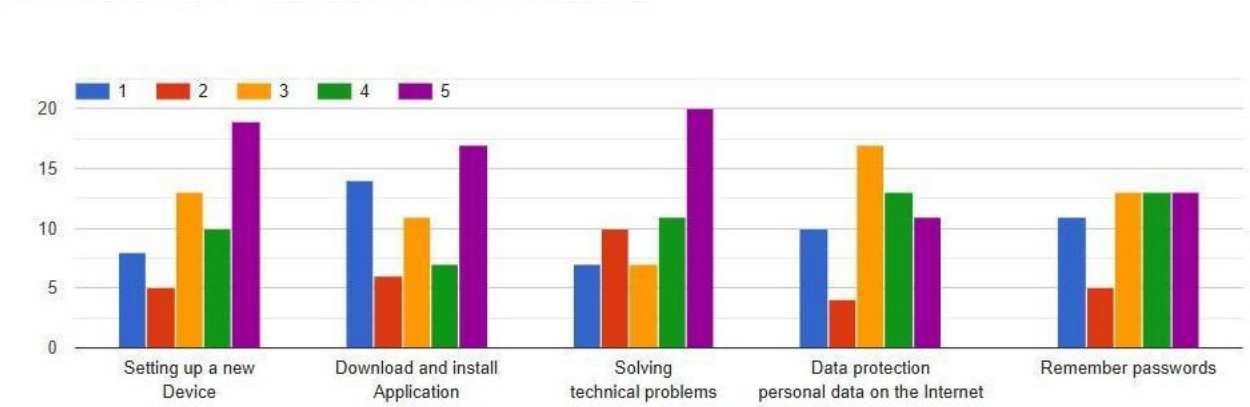


Most respondents felt reasonably confident in sending emails, with 31 people (56%) rating themselves high (4 or 5), while 19 (34%) felt less confident (1 or 2). Similarly, for making video calls, 29 respondents (53%) reported high competence, and 16 (29%) low competence.

Using search engines was an area of strong confidence, with 35 people (63%) rating themselves high, and only 13 (23%) feeling less skilled. Navigating social media showed a similar trend, with 30 respondents (54%) feeling competent and 19 (35%) less so.

Online shopping saw a slightly lower confidence level, with 28 respondents (51%) rating themselves high, while 22 (40%) felt less confident. Using health applications had the most mixed results: only 22 people (40%) felt highly competent, while 22 (40%) rated their skills lower.

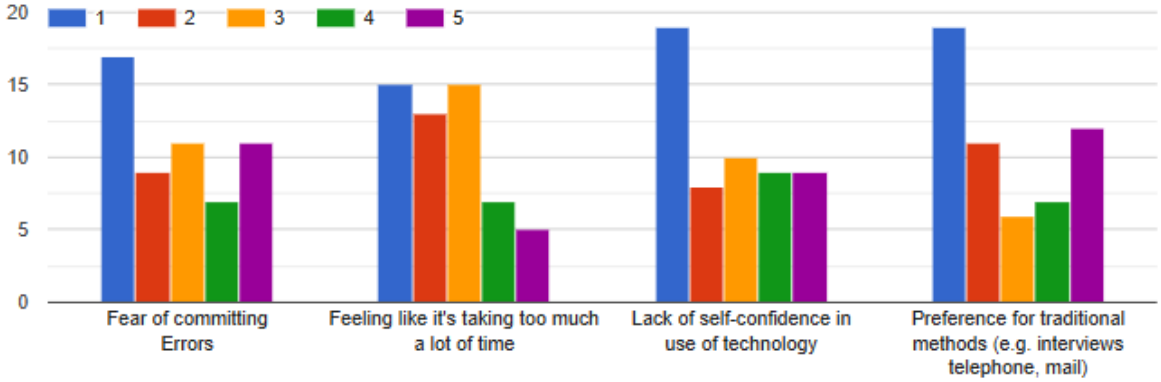
- **Have you ever faced difficulties with the following aspects of technology? (Scale: 1 = No difficulty, 5 = Many difficulties)**



Setting up new devices posed a major challenge for many, with 28 respondents (51%) rating their difficulty as high (4 or 5). Downloading and installing applications was also difficult for 24 people (44%), while resolving technical issues was similarly challenging for 31 respondents (56%).

Protecting personal data online showed a more mixed picture, with 24 respondents (44%) reporting high difficulty, but a larger group (14, 25%) experiencing little to no trouble. Remembering passwords also divided respondents evenly, with 26 people (47%) facing notable difficulties and 16 (29%) reporting minimal issues.

- **How often do you avoid using technology due to the following reasons? (Scale: 1 = Never, 5 = Very often)**



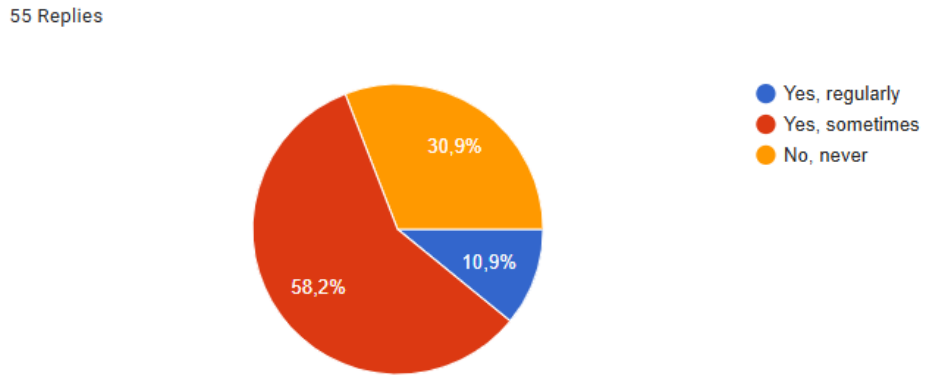
Fear of making mistakes was a common barrier—18 respondents (33%) said they avoid technology often or very often (ratings 4 or 5), while 26 (47%) said they rarely or never do.

Feeling that technology takes too much time led to avoidance for 12 people (22%), but 28 respondents (51%) reported it rarely or never affects their usage.

Lack of confidence was a factor for 18 respondents (33%) who avoid technology often or very often, while 27 (49%) said it rarely or never stops them.

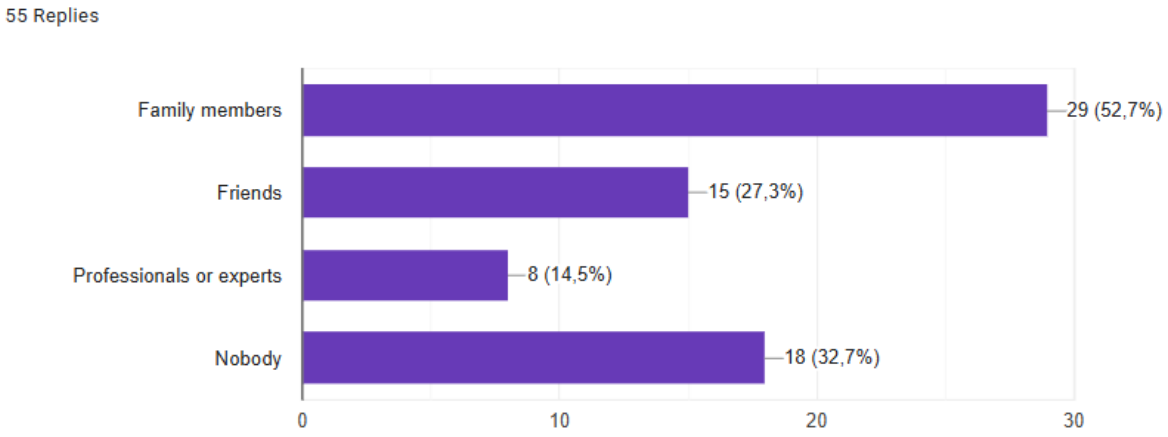
Preference for traditional methods like phone calls or mail was the most evenly split, with 19 respondents (35%) avoiding technology frequently due to this, and another 30 (55%) saying it seldom influences them.

- **Do you receive support when using technology?**



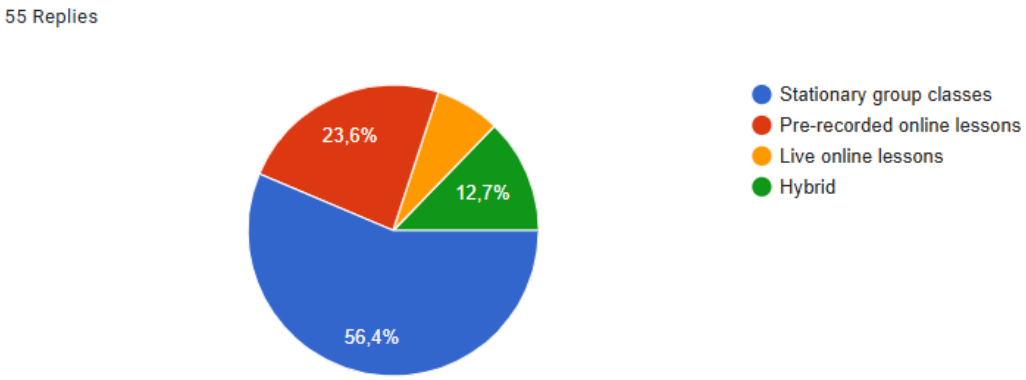
When asked about receiving support while using technology, most respondents said they do get help—32 (58%) receive support regularly, and 17 (31%) receive it occasionally. Only 6 respondents (11%) said they never receive any support.

- **Who do you receive support from? (Select all applicable options):**



When asked who provides them with support in using technology, most respondents pointed to family members (29, 53%), followed by friends (15, 27%) and professionals or experts (8, 15%). Notably, 18 participants (33%) said they don't receive support from anyone.

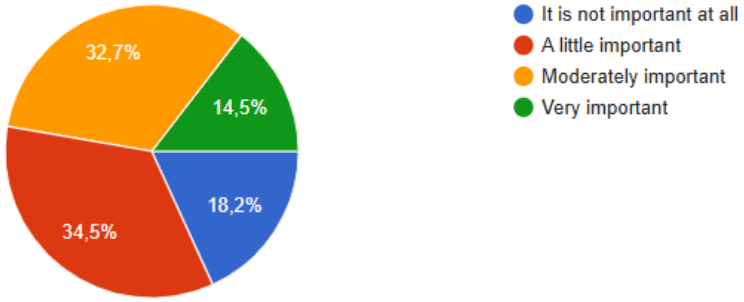
- **If you had the opportunity to attend a course to improve your digital skills, what format would you prefer?**



When asked about their preferred format for a digital skills course, most respondents (31, 56%) favored group lessons in person. Pre-recorded online lessons were the next most popular option (13, 24%), followed by hybrid formats combining in-person and online learning (7, 13%). Only a few respondents (4, 7%) preferred live online lessons.

- **How important do you find improving your digital skills?**

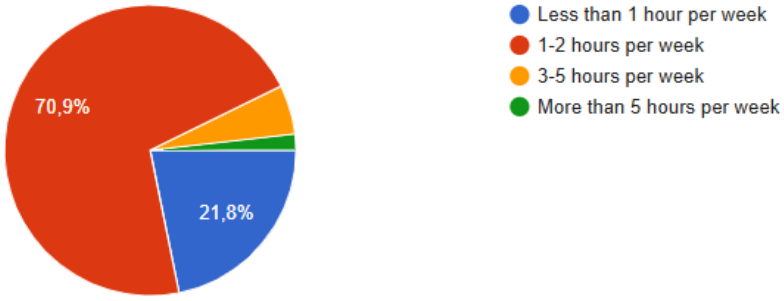
55 Replies



When asked about the importance of improving digital skills, opinions varied. While 18 respondents (33%) considered it moderately important, a larger group of 19 (35%) saw it as only slightly important. Ten respondents (18%) felt it was not important at all, and just 8 (15%) viewed it as very important.

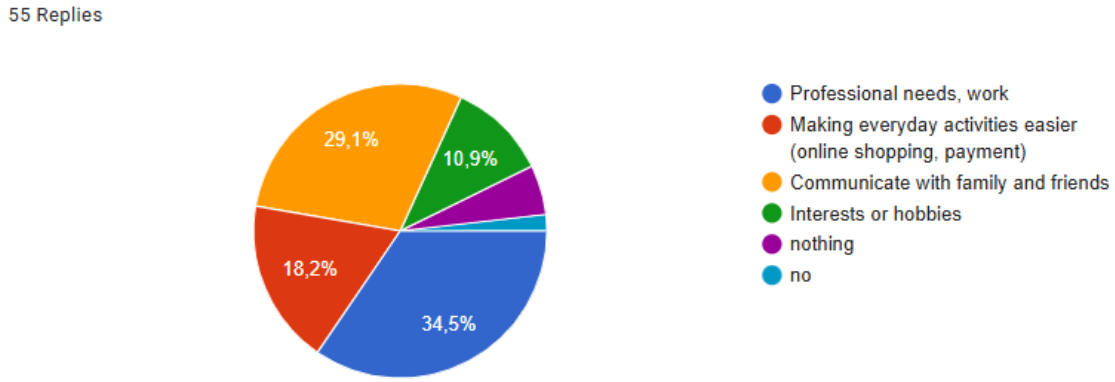
- **How much time are you willing to dedicate to improving your digital skills?**

55 Replies



When asked how much time they would be willing to dedicate to improving their digital skills, the vast majority of respondents (39, 71%) said 1–2 hours per week. Twelve participants (22%) were willing to spend less than an hour, while only a small number were open to committing more time—3 respondents (5%) chose 3–5 hours, and just 1 person (2%) was willing to dedicate more than 5 hours per week.

- **What is the main motivation driving you to improve your digital skills?**



When asked about their main motivation for improving digital skills, most respondents pointed to work or professional needs (19, 35%) and communication with family and friends (16, 29%). Facilitating daily activities like online shopping and payments motivated 10 respondents (18%), while 6 (11%) were driven by personal interests or hobbies. A small group of 4 participants (7%) indicated no particular motivation.

Summary of the questionnaires and focus groups of seniors

Fundacja "Fundusz Inicjatyw" organized four focus groups with seniors between February and April 2025. Each group consisted of 6-8 participants aged 65+. Participants varied in digital

literacy and motivation. The sessions revealed key insights into seniors' experiences with technology, their emotions, confidence levels, and training preferences.

Main difficulties and challenges:

- *Difficulty remembering how to use devices or apps; frequent relearning needed.*
- *Fear of making irreversible mistakes or breaking the device.*
- *Distrust toward online safety (scams, phishing, spam, viruses).*
- *Overwhelming interfaces (pop-ups, notifications, small fonts).*
- *Lack of motivation or belief that technology is necessary.*
- *Avoidance behavior: some seniors prefer not to use technology at all.*
- *Gaps in basic usage, like sending messages or browsing the internet.*

Feelings and concerns:

- *Common emotions include frustration, fear, anxiety, and helplessness.*
- *Some participants feel proud when they successfully use technology.*
- *Several emphasized that their use is limited to what's absolutely necessary.*
- *Many rely on family members instead of formal learning.*
- *A few expressed contentment with what they already know and manage.*

Confident vs. challenging tasks:

- *Confident with: phone calls, messaging (for some), browsing familiar websites, receiving invoices.*
- *Challenging: sending photos, handling official matters online, using unfamiliar apps (e.g., mObywatel).*
- *Confidence is often tied to frequency of use and simplicity of interface.*

Training preferences and needs:

- Preference for **individual sessions**, **step-by-step explanations**, and **patient guidance**.
- Interest in learning practical, everyday tasks (e.g., online payments, photo sharing).
- Desire for **printed manuals**, **notes**, or **visual aids** to refer back to.
- Many seniors stressed that training must be personalized and non-intimidating.
- Some do not see the need for any training, especially those who are content with minimal digital involvement.

Summary of findings

General observations

When seniors already have some digital familiarity, they are open to learning more and often eager to attend trainings. However, for many others—especially older seniors or those in rural areas—trainings should start with the basics.

Most seniors use technology for simple activities like browsing news, looking up recipes, using Facebook, or sending messages through apps like WhatsApp. Seniors close to age 65 are generally more open and motivated to learn, while interest and confidence decline with age.

Seniors with children abroad often develop some basic digital skills to stay in touch, but still feel insecure when it comes to online banking, shopping, or filling in forms—especially if they're alone. Even though most agree that smartphones can make life easier, they often doubt their ability to learn how to use advanced functions.

Despite varied skill levels and motivations, it's clear that seniors need access to learning opportunities that focus on **useful, daily tasks** and **build digital confidence**.

Main difficulties

- Fear of making mistakes or damaging the device
- Lack of basic digital knowledge and confidence
- Seniors cannot manage new apps without direct support
- Difficulty with e-banking and e-shopping
- Cybersecurity concerns (scams, phishing, data privacy)
- Small or confusing user interfaces (e.g., tiny icons, too many notifications)
- Limited digital access in rural areas, especially for 70+
- Physical limitations like poor vision or hand dexterity

Priority Needs

- Practical training on real-life tasks (e.g., sending emails, using WhatsApp, making video calls)
- Clear guidance on how to download, install, and use apps
- Easy-to-follow instructions on how to protect personal data and surf safely
- Digital security awareness (recognizing scams, safe passwords, trusted sites)
- Social media use (messaging, sharing, saving photos/videos, managing contacts)
- Other daily functions: setting reminders, typing notes, using alarms, checking health apps

Conclusions and Recommendations

Training is most effective in **small, face-to-face groups** where each participant receives enough attention. In-person sessions also help participants learn from each other and feel less alone in the learning process. If face-to-face is not possible, **hybrid models** can be considered—but not online-only formats for beginners.

Training should be **very practical**, **slow-paced**, and use **clear, simple language**. Seniors learn best with repetition, real examples, and printed handouts they can refer to at home.

In villages, seniors face greater digital exclusion due to lack of access, support, and equipment. They are more afraid to try new things, even when they see the value—such as making video calls or setting reminders for medicine. Often, they wait for family members to help, but such support isn't always available.

Many seniors are **reserved in using digital tools** due to fear of forgetting steps, not understanding updates, or lacking the money to purchase a computer or tablet. Despite this, they all recognize the usefulness of certain digital tools—and want to feel capable, safe, and independent when using them.

Training programs, especially in rural areas, must be **calm, patient, highly supportive**, and focused on **building confidence slowly**.

Suggestions for Interventions

- Provide face-to-face training in a friendly and non-intimidating environment
- Use simple, clear instructions supported by printed materials
- Include personalized support and time for questions
- Ensure content covers **digital safety**, safe browsing, and protection of personal data
- Show seniors how to safely use online shopping, e-services, and e-banking
- Promote useful smartphone features that support independence and well-being
- Repeat training where needed and encourage note-taking for at-home reference
- For motivated seniors, offer **advanced training** in e-services, e-government, or app-based tasks

5. Organisations' Findings

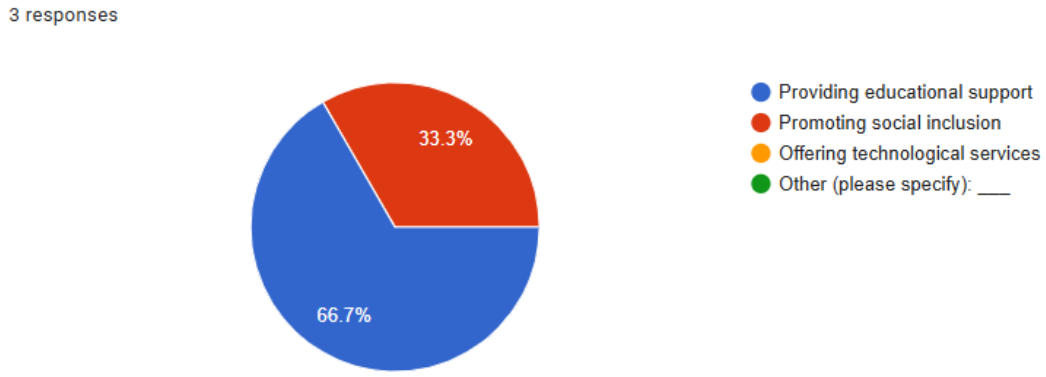
General Information

A total of 3 organisations answered the questionnaire regarding their background and work with seniors:

Organisations' Questionnaires & Focus Groups Findings

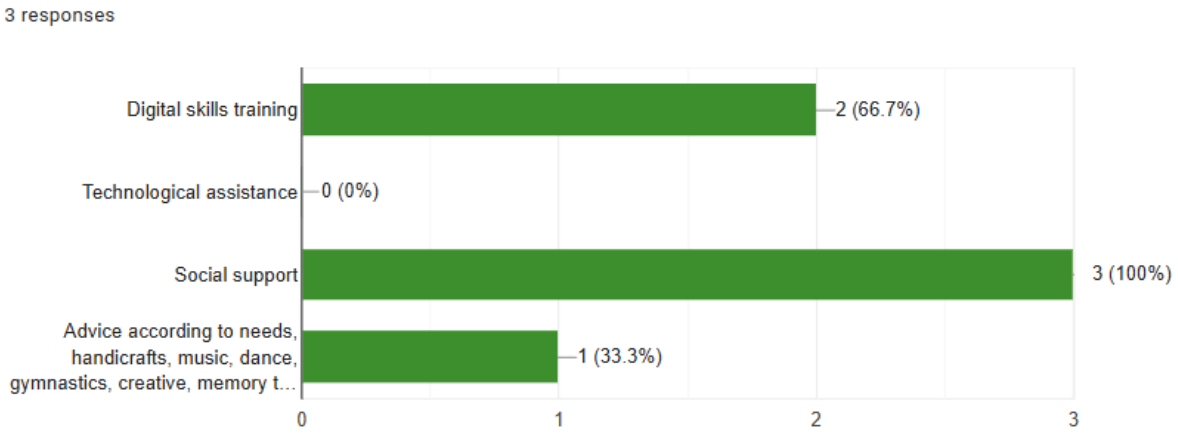
3 responses

- **What is the primary objective of your organization?**



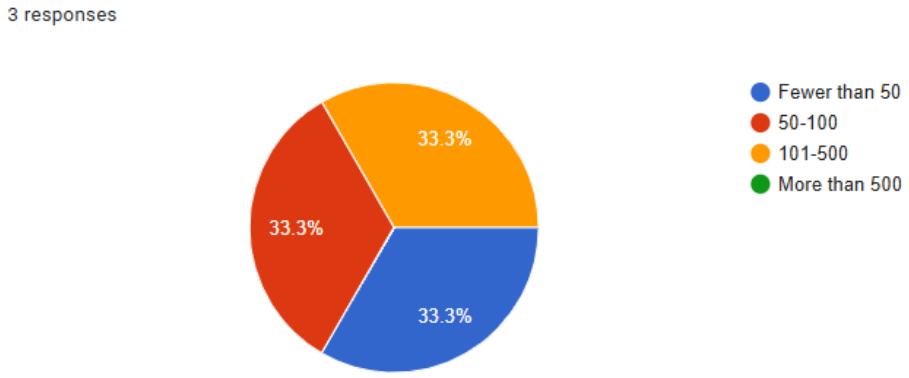
The respondents were asked about the primary objective of their organization. Most reported providing educational support (2), followed by promoting social inclusion (1). No respondents indicated offering technological services or other objectives.

- **What types of services do you offer to adults and seniors? (please select all that apply)**



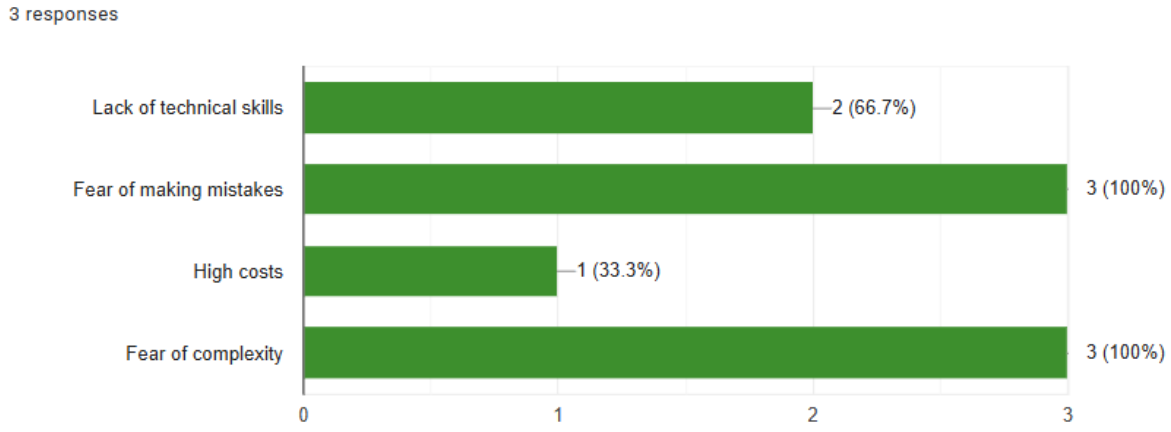
Regarding the types of services offered to adults and seniors, social support was the most common (3 respondents), followed by digital skills training (2). One participant mentioned providing advice tailored to individual needs, while technological assistance was not reported.

- **How many seniors or adults do you assist on average per year?**



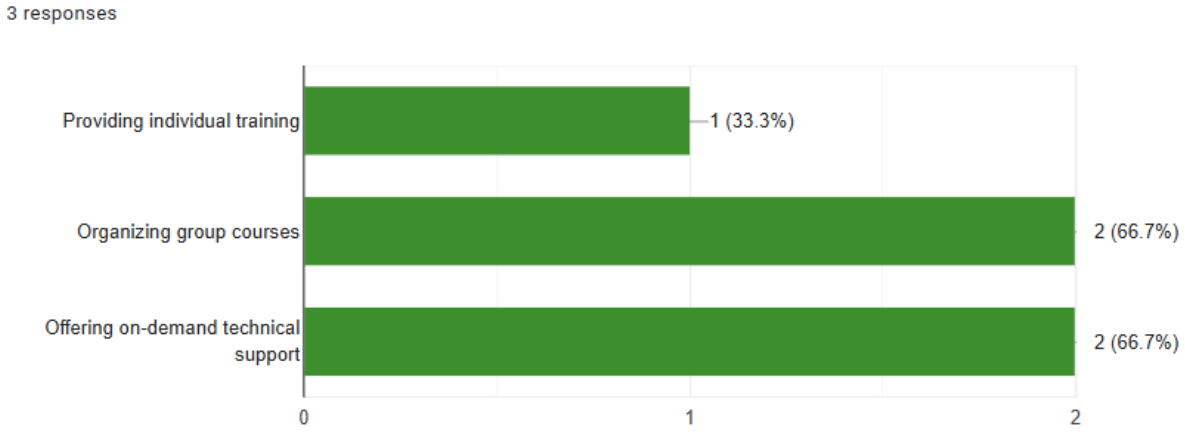
When asked about the number of seniors or adults they assist annually, respondents were evenly spread across the categories: one assists fewer than 50, one supports between 50 and 100, and one helps between 101 and 500 individuals per year.

- **What are the main challenges seniors report when using technology? (Select all that apply):**



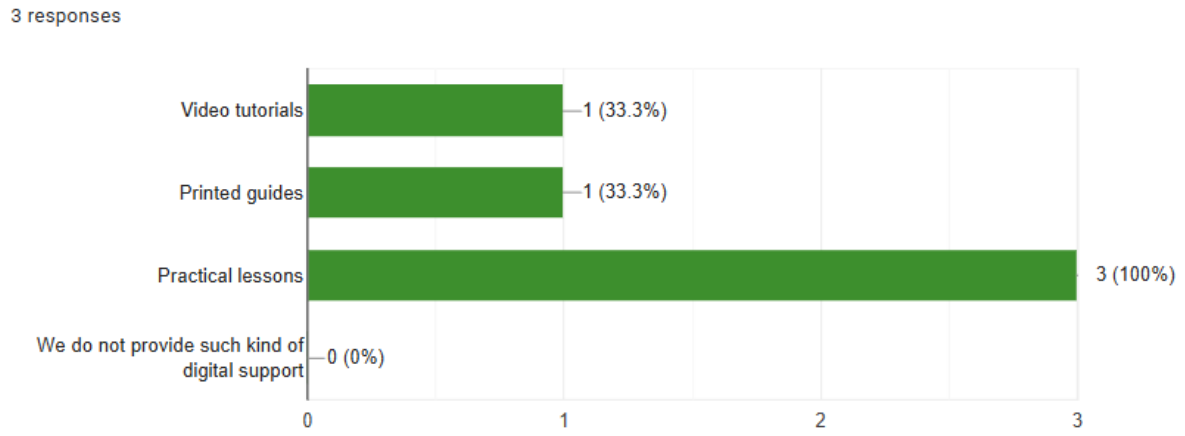
The main challenges seniors report with technology are fear of making mistakes and fear of complexity (3 respondents each). Lack of technical skills was noted by 2 participants, while high costs were mentioned by 1 respondent.

- **How does your organization address these challenges?**



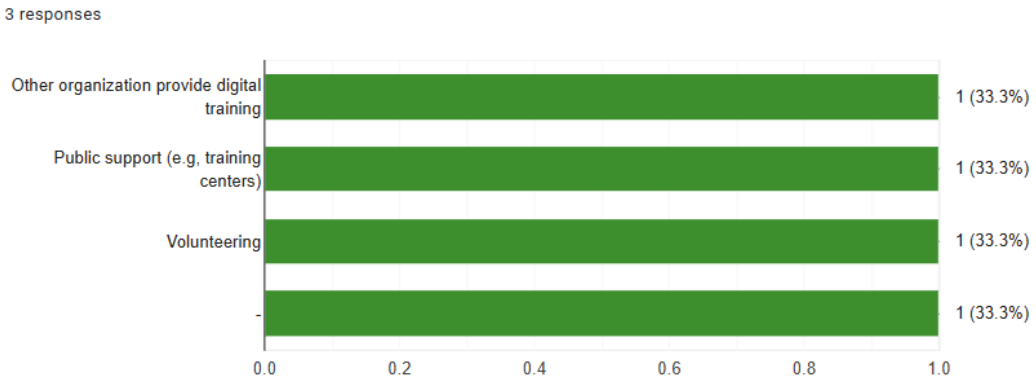
To address these challenges, organizations mainly rely on group courses (2 respondents) and on-demand technical support (2). Providing individual training was mentioned by one participant.

- **What resources do you use to support seniors in learning digital skills?**



When asked about resources used to support seniors in learning digital skills, practical lessons were the most common (3 respondents). Video tutorials and printed guides were each mentioned by one participant, while none reported not providing digital support.

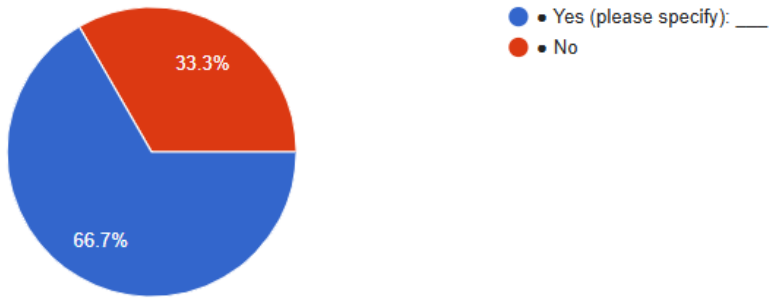
- **If you collaborate with other organizations or entities to improve your services, could you specify how?**



In terms of collaboration, each respondent mentioned a different form of partnership: one collaborates with other organizations that provide digital training, another receives public support such as access to training centers, and one relies on volunteers to enhance their services.

- **Do you believe there are gaps in the currently available resources to assist seniors?**

3 responses



Please identify the gaps you have observed.

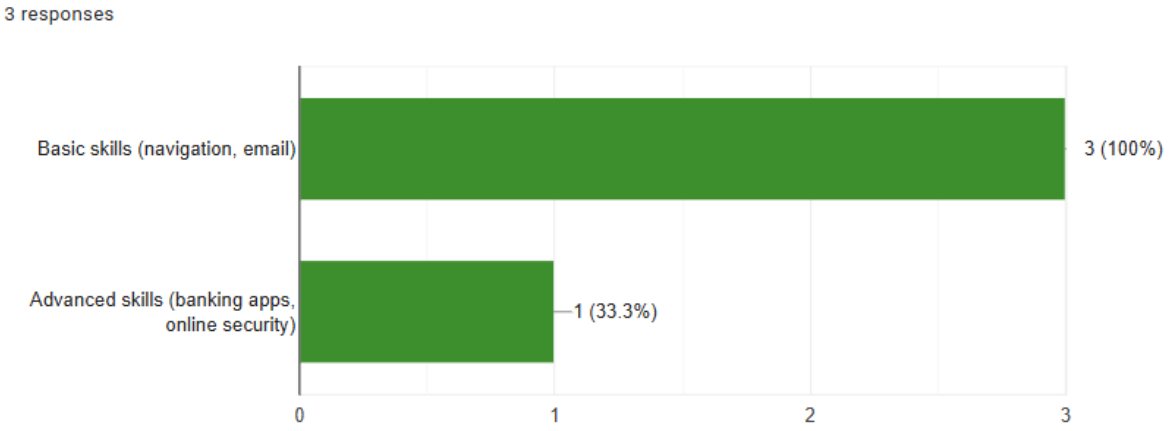
2 responses

Inadequate educational resource/material offerings to the capabilities of seniors

A broad topic. Generally concerning social infrastructure

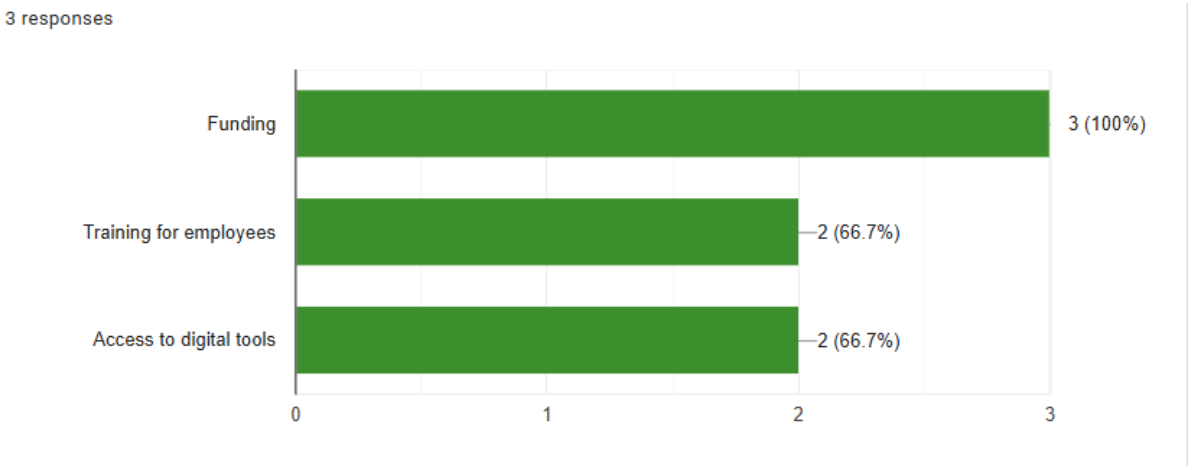
When asked whether there are gaps in the current resources available to assist seniors, two respondents answered yes. One pointed to the lack of educational materials tailored to seniors' capabilities, while the other highlighted broader issues related to social infrastructure. One respondent felt there were no significant gaps.

- **What are the main training needs you observe among seniors?**



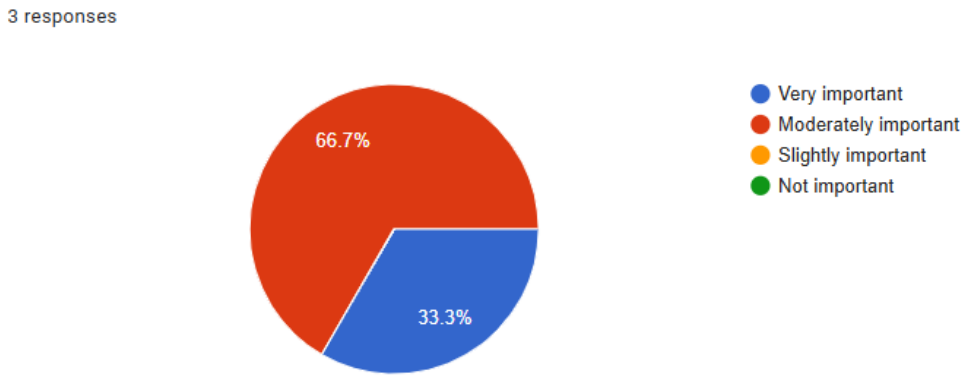
When asked about the main training needs observed among seniors, all respondents emphasized basic skills such as navigation and email (3 mentions). Only one participant noted a need for more advanced skills like using banking apps and understanding online security.

- **What type of support could enhance your work with seniors?**



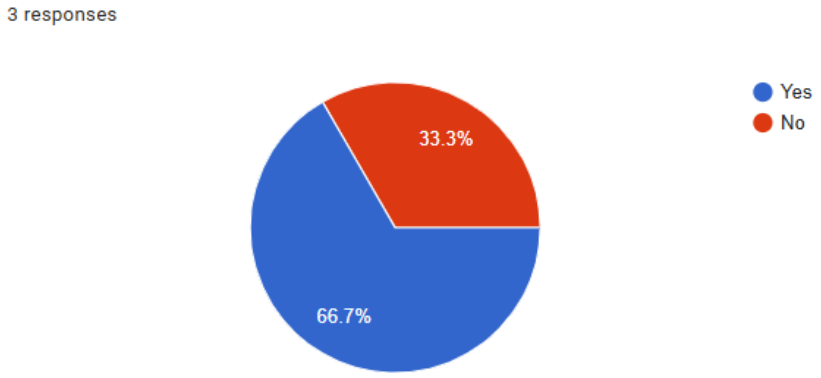
To enhance their work with seniors, all respondents identified funding as a key need (3 mentions). Additional support areas included training for employees (2) and better access to digital tools (2)

- **How important do you think technology is in improving the quality of life for seniors?**



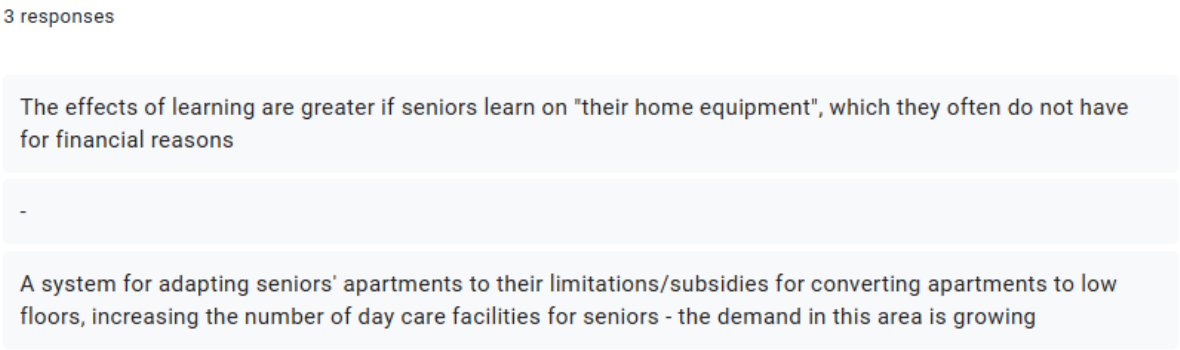
When asked about the importance of technology in improving seniors' quality of life, most respondents rated it as moderately important (2), while one considered it very important. No one viewed it as slightly or not important.

- **Would you be interested in collaborating on training programs specifically for seniors?**



When asked about interest in collaborating on training programs for seniors, two respondents (67%) expressed interest, while one (33%) was not interested.

- **Do you have any other information or suggestions you would like to share?**



In response to the open-ended question about additional information or suggestions, participants shared thoughtful insights. One emphasized that learning is more effective when seniors train on their own devices, though financial limitations often prevent them from owning such equipment. Another highlighted the growing need for adapting seniors' living spaces—suggesting subsidies for home modifications or relocation to lower floors. A third pointed to the increasing demand for more day care facilities dedicated to seniors.

- **What changes or improvements would you suggest to make digital services more accessible to seniors?**

3 responses

Larger letters and characters on the keyboard. Adjusting the mouse to the hand of a senior.

Providing seniors as participants with equipment, individual training for seniors

In order for seniors to be able to use technological solutions with relative ease, regular use is necessary. Acquired skills are quickly forgotten if they are not practiced further.

When asked for suggestions to make digital services more accessible to seniors, respondents offered several practical recommendations. One suggested physical adjustments, such as larger text and keyboard characters, and ergonomically adapted mice. Another emphasized the importance of regular practice, noting that seniors tend to forget digital skills quickly if not used consistently. A third recommendation focused on access—highlighting the need to provide seniors with their own equipment and offering individualized training to support effective learning.

Summary of findings

Suggestions of the participating organizations

- Provide basic digital training tailored to non-working seniors, focusing on simple and useful tasks like email, internet browsing, and device navigation.
- Deliver training in small, in-person groups at familiar, accessible community locations (e.g., senior centers, day care facilities).
- Use practical lessons on seniors' own devices when possible to boost confidence and retention.

- Adapt training pace to seniors' learning rhythms: repeat often, give time for questions, and allow space for peer discussion.
- Include simple video tutorials, printed guides, and regular technical support to reinforce skills between sessions.

Identified gaps in resources and support

- Lack of funding for personalized training, updated equipment, and professional development for trainers.
- Insufficient access to affordable digital tools, especially in rural areas or for low-income seniors.
- Few educational materials adapted to seniors' cognitive and physical needs (e.g., simplified language, large fonts, ergonomic devices).
- Missing infrastructure for ongoing engagement—such as local digital hubs or "internet clubs" where seniors can practice and socialize.

Changes or improvements to make digital services more accessible to seniors

- Develop donor-supported programs to subsidize devices, internet access, and training fees.
- Adapt hardware interfaces—larger keys, simple menus, and readable displays—to seniors' abilities.
- Promote regular use and repetition through scheduled practice sessions or guided use environments.
- Prioritize personalized support and one-on-one instruction for seniors with low digital confidence.
- Integrate digital skills support into broader social services (e.g., health care, banking, municipal offices).

Recommendations

- Support device ownership among seniors through subsidies or lending programs.
- Invest in libraries, adult education centers, and volunteer “Digital Ambassadors” to sustain local training offers.
- Launch mobile training units or campaigns targeting rural regions and isolated seniors.
- Teach practical cybersecurity habits as part of all training programs.
- Foster partnerships between NGOs, local governments, and tech providers to co-create inclusive digital environments.
- Track outcomes like device usage, skill growth, and increased digital confidence to improve future initiatives.

6. References & Annexes

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Annexes

Questionnaires Poland

[Focus Groups Poland]

E. COUNTRY CASE STUDY: SLOVENIA

Authors: Ljudska univerza Celje, Slovenia

Slovenia's research findings

1. Current situation of seniors regarding digital readiness, digital safety, and digital skills of seniors

According to national statistics and digital policy reports, seniors in Slovenia face considerable digital exclusion. While public frameworks exist and innovative projects have been launched in recent years, a large share of people aged 65 and older still lack basic digital skills and access to digital tools, especially in rural areas. In 2023, only 17% of Slovenians aged 65–74 had at least basic digital skills, compared to the EU average of 28.19% for the same age group[1112]. At the same time, 47% of the total population aged 16–74 had basic digital skills, while 43% of people aged 65–74 had no digital skills at all, indicating a significant generational digital gap (Stat.si, 2024).

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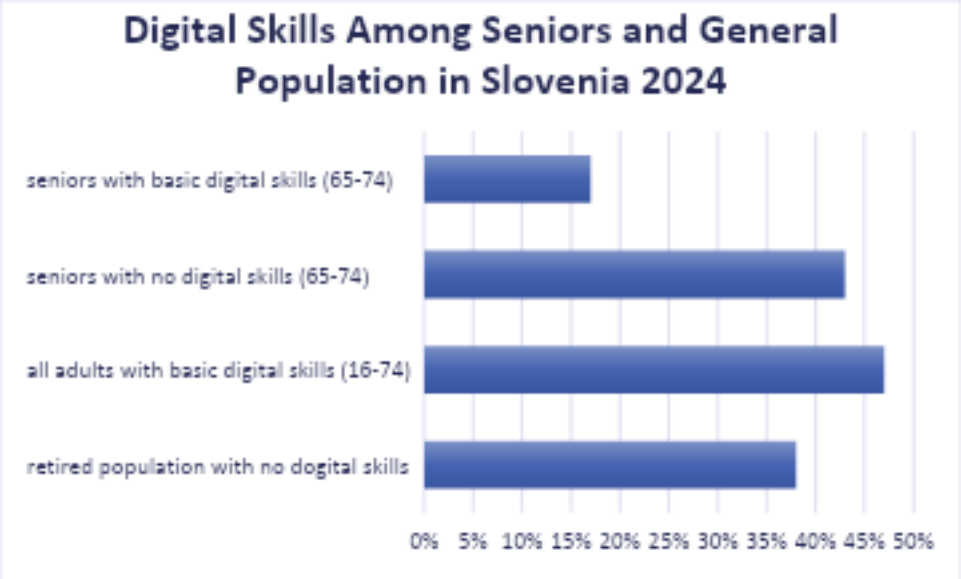
[12] *Slovenia lags behind the EU average in digital skills among older adults, which poses a challenge for meeting the Digital Decade 2030 targets.*



Main report findings

Living areas: The urban–rural digital divide is a persistent issue. Seniors in rural areas face a double barrier of limited digital infrastructure and a lack of localized learning opportunities. Mobile outreach projects are beginning to address this gap, but coverage is still partial.

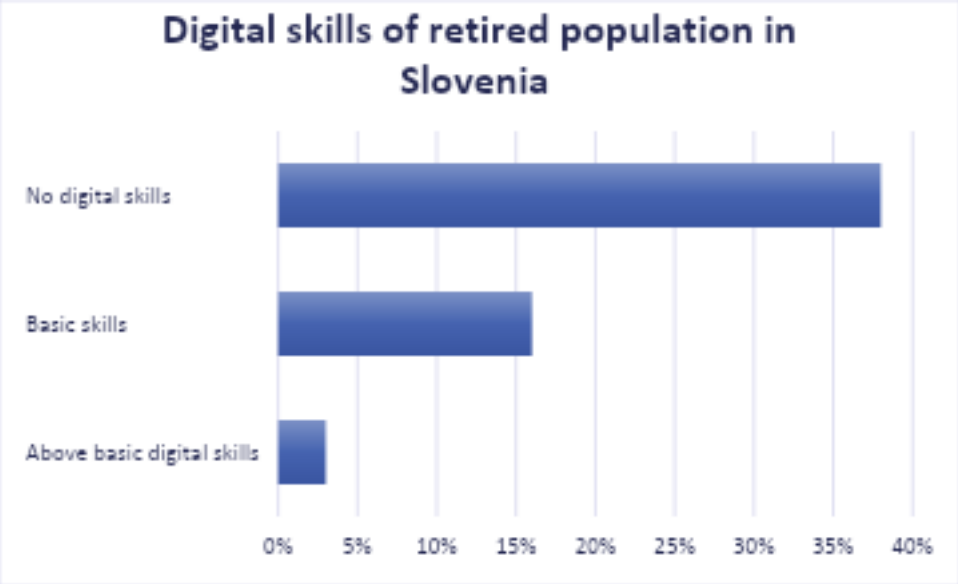
Education level and retirement status: Among the retired population in Slovenia, only 3% have above-basic skills, 16% have basic skills, and 38% have no digital skills at all. This puts Slovenia behind several EU counterparts in terms of senior digital inclusion (stat.si).

Gender gap: Gender disparities among seniors are relatively low, with digital skills spread quite evenly. However, older women, especially those with lower education levels, are more likely to be digitally excluded.

Strategic frameworks and national policies

Slovenia has adopted several national digital strategies to support inclusion:

- "Digital Slovenija 2030"[13] outlines the national vision for digital transformation, with a focus on improving digital skills and reducing exclusion.
- The Digital Inclusion Promotion Act (2022)[14] introduced measures like digital vouchers for adults aged 55+ to access training and equipment.
- The Digital Decade Strategic Roadmap aligns Slovenia with EU targets to reach 80% basic digital skills coverage among adults by 2030.



National and regional initiatives

One of the most notable and successful efforts to reduce the digital gap for seniors is:

[13] *This national strategy outlines the government's vision for digital transformation, including e-government, e-health, and digital public services by 2030.*

[14] *The Act introduced "digital vouchers" for purchasing computer equipment and free basic digital skills courses to support vulnerable groups.*

Simbioza Mobiln@[15] (Digital Skills and Jobs Platform, 2023) (Mobile Classroom Initiative)

This nationwide program, launched in 2021, uses a mobile classroom to deliver **free, hands-on digital skills workshops** to older adults across rural and urban areas of Slovenia. Seniors learn how to use smartphones, browse the internet, access public e-services, and stay safe online. In 2024 alone, the mobile classroom organized over **330 workshops** and reached more than **1,600 seniors**, often in underserved rural communities. The initiative was recognized as a finalist in the **European Digital Skills Awards 2023**.

Digitally Included Platform (DIP)

This initiative, active in 2022–2023, offered an online learning platform with video content, quizzes, and tutorials tailored to senior learners. It was developed through collaboration between Simbioza, ZDUS, and ACS and supported by the Slovenian Ministry of Digital Transformation. It focused on building **intergenerational learning environments** and empowering older adults to learn at their own pace.

Additional support mechanisms

Digital Vouchers for 55+

Under the **Digital Inclusion Promotion Act (2022)**, citizens aged 55 and older are entitled to a **€150 digital voucher**, which they can use to:

- Enroll in accredited digital training courses
- Purchase digital devices (new or refurbished)

These vouchers are distributed through public tenders, managed via qualified providers with proper infrastructure and staff. The goal is to eliminate financial barriers, expand access to

[15] *The project has been recognized at the European level, being shortlisted as a finalist in the European Digital Skills Awards 2023.*

essential digital tools, and promote cybersecurity awareness. In 2022, more than €31 million was allocated for these measures.

Intergenerational Programs with Youth Volunteers

Slovenia has pioneered intergenerational learning models, connecting seniors with youth volunteers—an approach that fosters mutual learning and community bonds.

- **Simbioza Genesis projects**: For over a decade, they've matched senior learners with student volunteers, offering both digital skills workshops and recreational activities (like sports). Since 2011, over **35,000 participants** across more than 300 locations have benefited. In a single digital outreach week, over 9,000 seniors were taught nationwide.
- The **mobile classroom (Mobiln@)** initiative includes youth mentors who travel with the van to rural areas and guide seniors through smartphones, e-services, and cybersecurity lessons.
- Regional Erasmus+ "Digital Generations" project (2021–2024): young mentors collaborated with seniors in Kamnik and other municipalities to enhance creativity and digital engagement through co-learning tools.

Public Libraries and Lifelong Learning Centres

Public libraries and learning centres play a vital role in senior digital education by offering:

- Free computer access**,** including up-to-date workstations and internet
- Structured digital literacy classes and workshops
- Information literacy training, tailored to different skill levels
- Mobile library services (bibliobus) visiting remote locations, care homes, and hospitals—bringing equipment and classes directly to residents

- Intergenerational and cultural events, from tech help desks to beginner-friendly coding sessions

These initiatives reduce financial, educational, and accessibility barriers, foster social cohesion through intergenerational exchange, and ensure senior citizens across urban and rural areas can learn digital skills. Though well-established, challenges remain around consistent coverage, especially in smaller municipalities.

2. Main Challenges

As Slovenia advances its national digital transformation goals under strategies like Digital Slovenija 2030 and the Digital Decade Strategic Roadmap, a key demographic continues to face systemic barriers—older adults. While some support mechanisms exist, such as digital vouchers and intergenerational learning programs, seniors often remain underserved in the digital landscape. The barriers they face are not only technological, but also social, psychological, and infrastructural. Main challenges include:

Low Digital Literacy and Confidence - Many seniors in Slovenia lack the fundamental digital skills needed to participate in today's digital society. Tasks such as using smartphones, navigating government e-portals, conducting online banking, or understanding app permissions can be overwhelming. The unfamiliarity and anxiety associated with technology often lead to avoidance or dependence on others, limiting independence and access to services.

Fear and Distrust of Technology - A strong psychological barrier among seniors is the fear of "doing something wrong." This is often rooted in a lack of confidence and a fear of consequences—breaking a device, losing data, or becoming victims of scams. Government websites or online medical forms can appear overly complicated and intimidating, which further alienates older adults. As a result, some seniors avoid online interactions altogether, opting for in-person services even when digital options would be more convenient.

Vulnerability to Online Scams - Cybersecurity is a major concern for the elderly. According to Slovenia's SI-CERT[16] (SI-CERT/ARNES, 2023) (National Cyber Security Response Centre), phishing (National Police of the Republic of Slovenia, 2023)[17] attacks and online frauds targeting older adults are on the rise. Seniors are particularly susceptible to scams involving fake banks, romance schemes, fraudulent online stores, and impersonation of family members (like the "grandparent scam"). Their limited understanding of digital safety and a tendency to trust official-sounding communication makes them easy targets.

Limited Access in Rural Areas **-** Seniors living in rural or remote areas face additional challenges due to inadequate infrastructure. Poor broadband connectivity, a lack of public access points like libraries or digital hubs, and fewer training opportunities compound digital exclusion. While many municipalities and public libraries offer digital training, access is uneven and heavily dependent on local resources.

Complex and Inaccessible Digital Systems **-** Many seniors report difficulty using national digital systems, especially those related to health, taxes, or administrative procedures. User interfaces are often not designed with elderly users in mind. The lack of simplified design, voice support, or step-by-step guidance makes these platforms hard to navigate. Some older adults take over an hour to fill out simple forms, while others simply give up or seek help from younger family members.

3. Trainers' Findings

General Information

Between **24 March and 15 April 2025**, a total of **26 educators** participated in either focus groups or completed questionnaires regarding the teaching of **digital skills to older adults**. These trainers

[16] *SI-CERT is Slovenia's national Computer Security Incident Response Team, regularly issuing warnings about online fraud, with older adults being a common target.*

[17] *The Police have observed a steady rise in online banking fraud and phishing-related crimes, emphasizing the importance of cybersecurity awareness.*

come from diverse educational and professional backgrounds but share experience in digital literacy education.

Participant Overview

A total of **25 educators** took part in the research, including **11 trainers** who participated in focus groups and **14 trainers** who responded to the questionnaire.

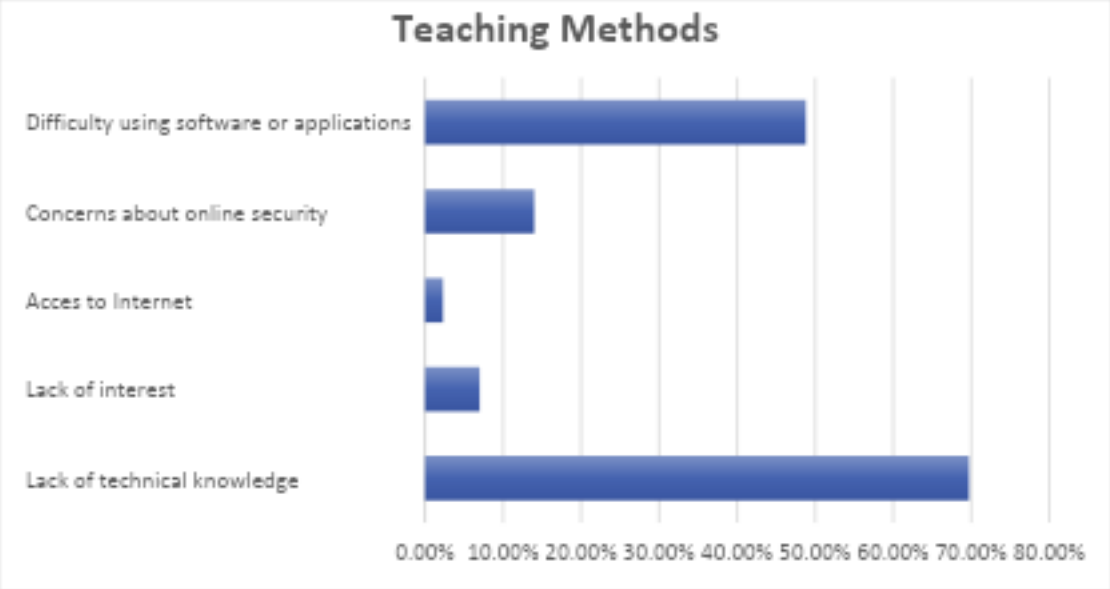
Among the **focus group participants**, there were **6 women** and **5 men**. All had direct experience teaching digital skills to older adults. Most had between **4 and more than 6 years of teaching experience**, and all held at least a **university-level education**. While exact ages were not recorded, the discussions indicate the majority are mid-career professionals with substantial pedagogical expertise.

Among the **questionnaire respondents**, the majority were aged **30–39 or 40–65**, with **9 female** and **6 male** participants. All respondents held a **university-level or higher education** and had experience delivering digital education to older adults. Most reported having **more than four years** of relevant experience.

Trainers' Questionnaires & Focus Groups Findings

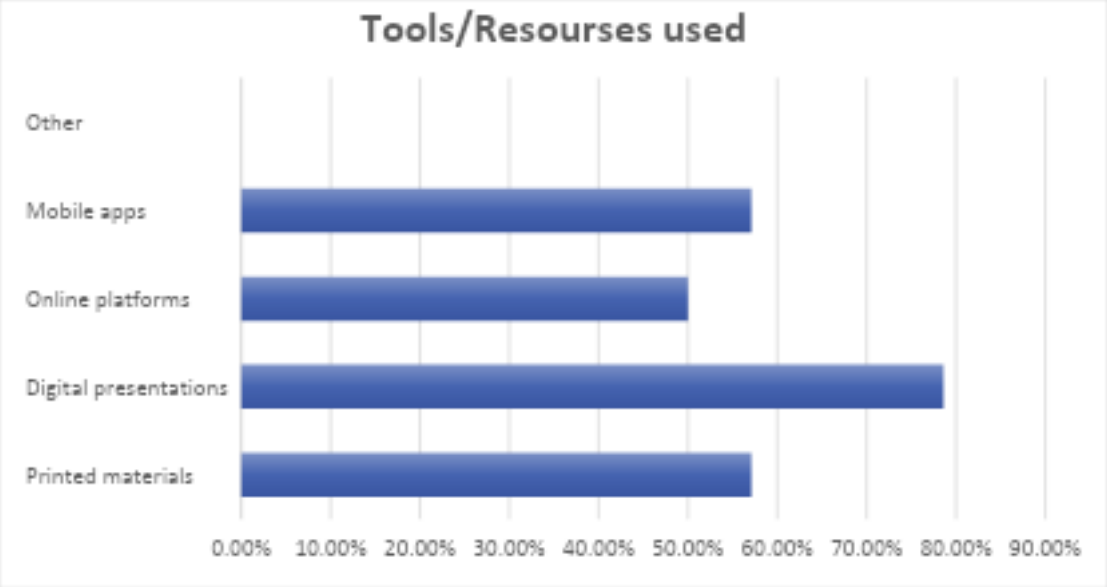
Ljudska univerza Celje gathered responses from 14 teachers regarding the seniors teaching.

What teaching methods do you currently use for digital skills training?



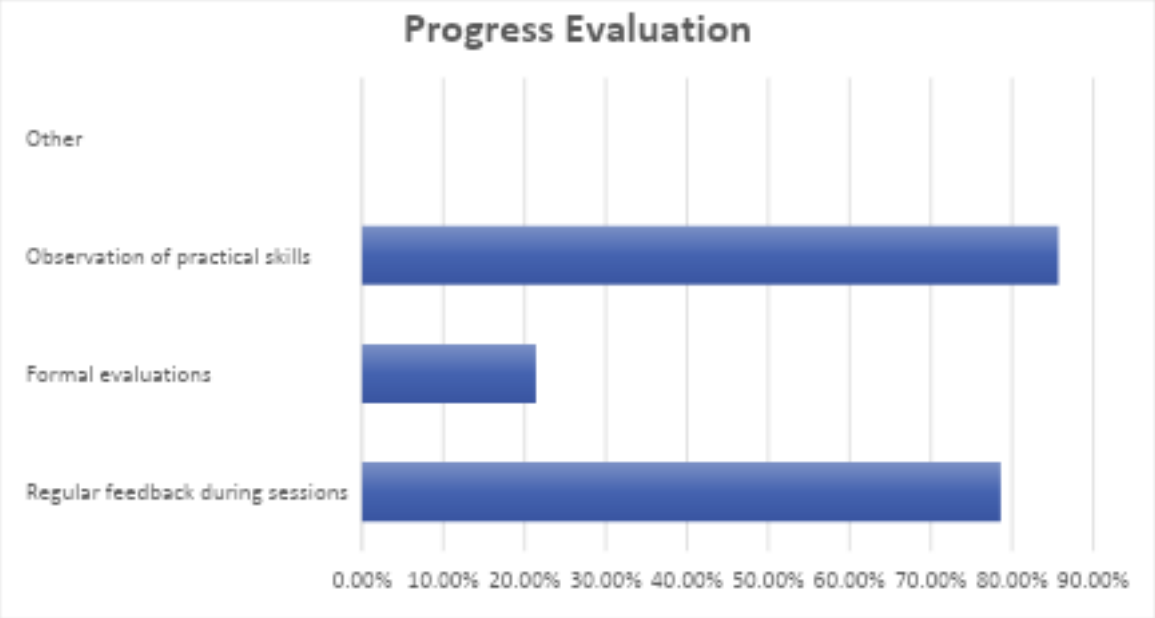
Out of 14 educators who responded to this question, **group sessions** were the most commonly used method, mentioned by **10 out of 14 educators (71.4%)**. These sessions likely foster collaboration, peer learning, and a sense of community among participants. The second stated method was **individual support** used by **9 educators (64.3%)**, indicating the importance of personalized attention, especially when dealing with learners who may progress at different paces. **Online tutorials** were employed by **4 educators (28.6%)**, showing some integration of digital content, though less widespread, likely due to limited digital literacy among older learners. **Guided practical exercises** were mentioned by only **3 educators (21.4%)**, emphasizing hands-on learning where participants actively practice what they are taught under supervision.

What resources or tools do you use during your training sessions?



Out of 14 educators who responded, **digital presentations** (e.g., PowerPoint, Canva) were the most commonly used resource, mentioned by **11 out of 14 educators (78.6%)**. These tools help structure content visually and are useful for guiding sessions. **Printed materials** (e.g., handbooks, manuals) were used by **8 educators (57.1%)**, showing that tangible, easy-to-follow resources remain essential, especially for older learners who may feel more comfortable with physical documents. **Mobile apps** were also used by **8 educators (57.1%)**, indicating a growing emphasis on practical, real-world tools that learners can continue using independently outside the classroom. **Online platforms** (e.g., learning portals, web-based tools) were employed by **7 educators (50%)**, reflecting an increasing integration of digital environments into the learning process, despite potential barriers for less tech-savvy participants.

How do you evaluate the progress of older adults in learning digital skills?



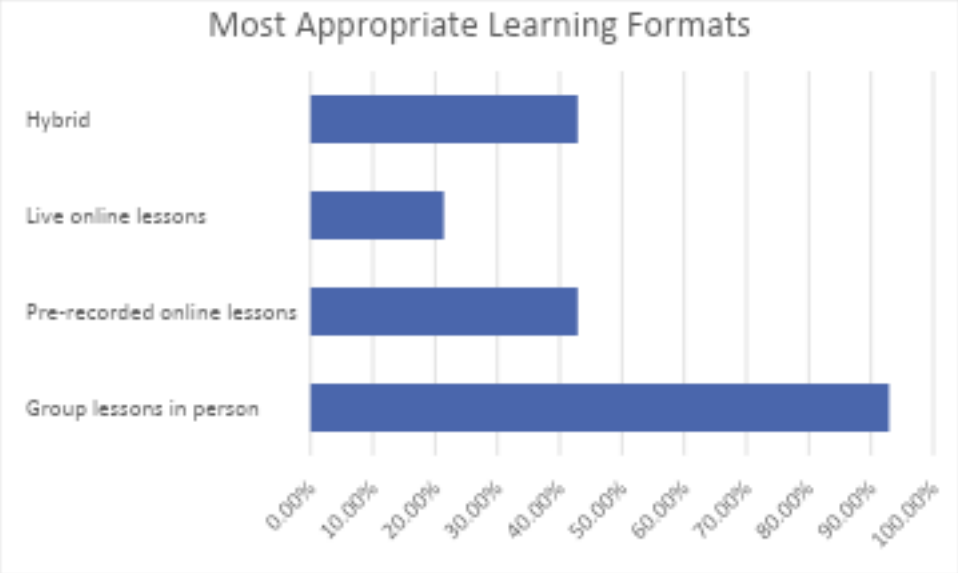
When evaluating the progress of older adults in learning digital skills, educators rely primarily on **practical and ongoing methods** tailored to the learners' needs and pace.

The most commonly used method is **observation of practical skills**, cited by **85.7% of educators**. This involves watching how confidently and independently older adults perform digital tasks, which provides real-time insight into their understanding and retention.

Regular feedback during sessions is also widely applied, used by **78.6% of respondents**. Through informal check-ins, questions, and interactive discussions, educators can gauge learners' comfort levels and clarify misunderstandings as they arise.

In contrast, only **21.4% of educators** reported using **formal evaluations** (e.g., structured tests or assessments). This suggests that while formal tools have a role, they are less favored in adult digital education, where practical competence and learner confidence are often more important than test results.

From your experience, which is the most appropriate format for adults and seniors?



Based on educators' responses, the most appropriate format for teaching digital skills to adults and seniors is **in-person group lessons**, which were favored by **92.9%** of participants. This strong preference reflects the value of face-to-face interaction, peer support, and real-time guidance, especially important for older learners who may lack confidence or prior digital experience.

Hybrid formats (a mix of in-person and online learning) and pre-recorded online lessons were each selected by **42.9%** of educators. These approaches offer flexibility and allow learners to revisit content at their own pace, although they may require a certain level of digital competence to be effective.

Live online lessons were the least preferred option, mentioned by only **21.4%** of educators. This may be due to technical barriers, connectivity issues, or the lack of immediate hands-on support, which many older learners still rely on.

Could you recommend the duration of the training?

Based on the educators' responses, the recommended duration for digital skills training for older adults varies, but there is a clear trend toward shorter, focused programs:

- **50% of educators** recommended **20 hours**, suggesting that a compact and manageable timeframe is ideal for maintaining attention, reducing fatigue, and fitting into older learners' schedules.
- **29%** suggested **25 hours**, indicating a slightly extended format that allows for more in-depth coverage while remaining accessible.
- **21%** recommended **30 hours**, likely aiming to provide more comprehensive training for learners who may need extra time for practice and reinforcement.

What are the main challenges you encounter when teaching digital skills to older adults?

When teaching digital skills to older adults, educators report several key challenges:

- The most significant barrier is **limited prior knowledge of technology**, cited by **92.9% of educators**. Many older learners start with minimal digital experience, requiring instructors to begin with the very basics and proceed slowly.
- **Language barriers** are another notable challenge, mentioned by **64.3%**. This refers to both general literacy issues and difficulties with the specific technical vocabulary used in digital contexts.
- **Difficulty in adapting to different learning paces** is also a concern. Older adults often progress at varying speeds, which demands a flexible and individualized teaching approach.

Interestingly, **none of the educators** identified **resistance to learning new skills** as a challenge. This suggests that while older learners may face technical or cognitive obstacles, they are generally motivated and open to learning.

Do you have any other recommendations concerning needs, methodology, or tools?

Educators offered several key recommendations for improving future digital skills training for older adults. All respondents (**100%**) emphasized the importance of **learning by doing**, with a focus on real-life tasks such as sending emails or searching for public transport information. A large majority (**85.7%**) highlighted the need for **step-by-step guidance**, using simplified instructions and visual aids. **78.6%** recommended **repetition and reinforcement** of key concepts to build learners' confidence and ensure lasting understanding. A **task-based approach** was supported by **71.4%** of educators, suggesting that each session should be built around a clear, practical goal. The need for **individualized learning** was raised by **64.3%**, with suggestions to organize participants into small, level-based groups and offer one-on-one support where necessary. **Peer learning** was also encouraged by **50.0%**, as a way to foster collaboration and mutual support. Lastly, **42.9%** proposed the use of **digital platforms** such as Google Drive or Moodle, particularly for more advanced learners who want access to additional materials and independent practice.

Summary

The data collected from 25 educators in our region reveal consistent priorities and challenges in digital skills training.

Educators most commonly use **group sessions and individual support**, supported by digital presentations and printed materials. They evaluate learners primarily through **observation of practical skills** and regular feedback.

When asked about the most suitable training format, **preferred in-person group lessons**, while hybrid and pre-recorded formats were seen as moderately useful. Half of educators recommended **20 hours of training**, suggesting a need for short, focused programs.

The main challenges include **limited prior knowledge** and **language barriers**, while resistance to learning was not considered a major issue. Focus group participants confirmed these barriers and emphasized the emotional aspects of learning, such as fear of failure or embarrassment.

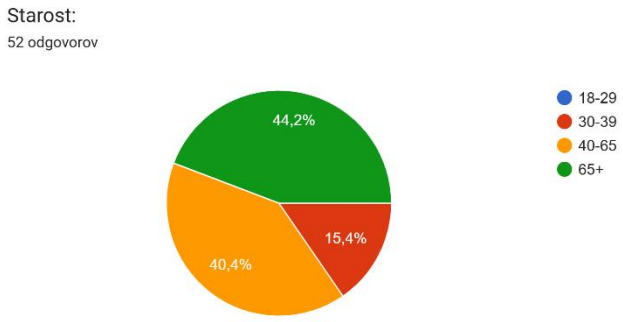
Regarding future training, educators unanimously recommended a **"learning by doing"** approach, **step-by-step guidance**, and **repetition**. Focus groups supported these findings, adding that they value **patience, real-life tasks, and familiar devices** (especially mobile phones).

In conclusion, training should be **practical, personalized, and supportive**, with a strong emphasis on everyday digital tasks, flexible pacing, and a safe, encouraging environment. These insights should guide the design of future programs in our project.

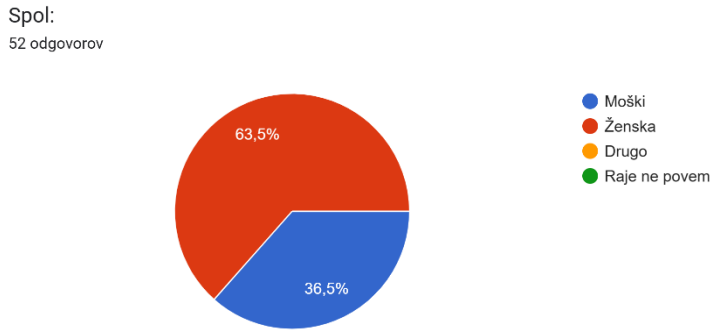
4. Seniors' Findings

General Information

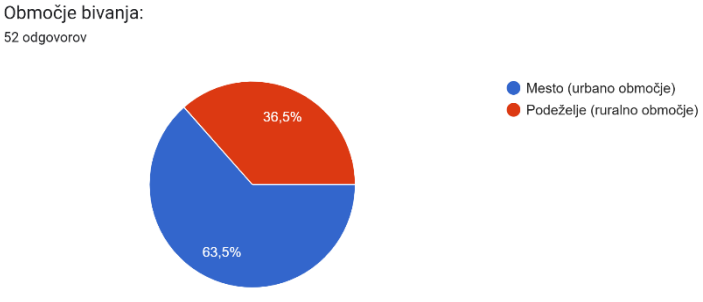
In Slovenia, we conducted four focus groups with seniors and gathered 52 responses through the questionnaire for senior learners on digital skills. Most participants 44,2% were older than 65, 40,4% were between 40 and 65 years old, and 15, 4% were between 30 and 39 years old. The aim was to find out what digital devices they use, how much time they spend using technology, how confident they feel and what kind of support they need.



Most of the participants were men.

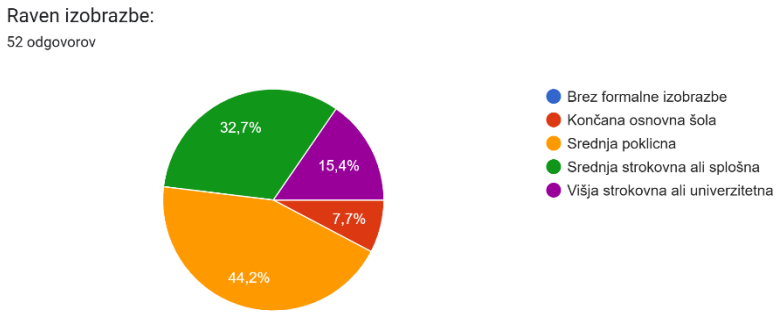


We also asked them where they live. 33 out of 52 senior participants (63.5%) said that they live in cities, while 19 (36.5%) said they are from rural areas.

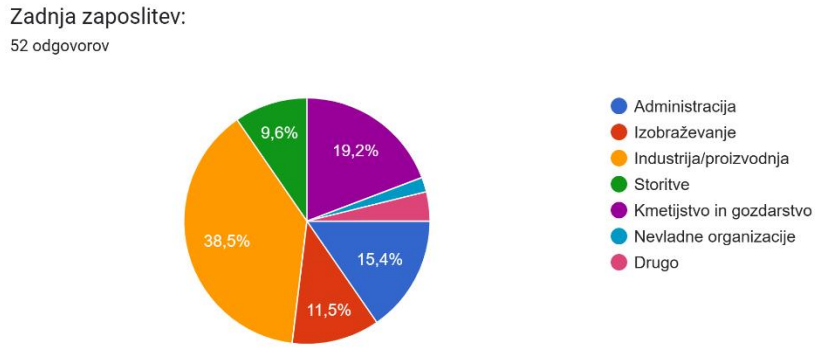


Level of Education

An analysis of the participants' educational background reveals that the largest proportion (44.2%) had completed vocational education. Secondary education was reported by 32.7% of respondents, while 15,4% had attained a university degree. A smaller segment, comprising 7.7% of participants, reported having completed only primary education. These figures indicate a predominantly mid-level educational profile within the sample.



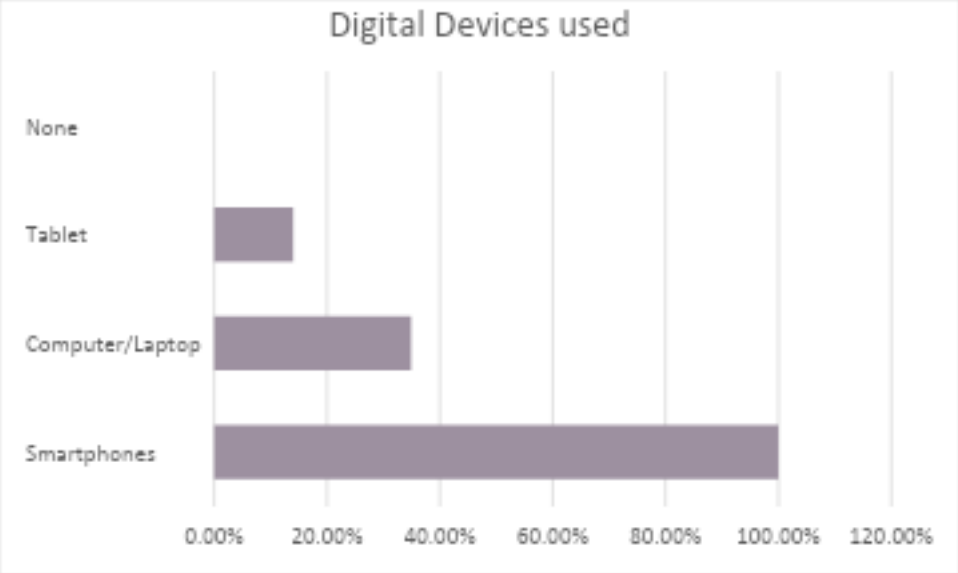
Previous occupation



Data on the participants' employment sectors show that the largest share (38.5%) is employed in industry and manufacturing. This is followed by agriculture and forestry (19.2%), public administration (15.4%), and non-governmental organizations (also 14.0%). Education is represented by 11.5% of respondents, 9.6% worked in the services sector, 1,1% said they worked in non-governmental organizations, while 4.7% reported working in other sectors.

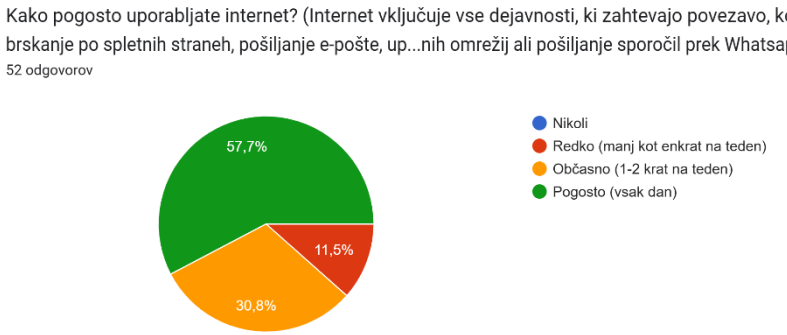
Seniors' Questionnaires & Focus Groups Findings

What digital devices do you own?



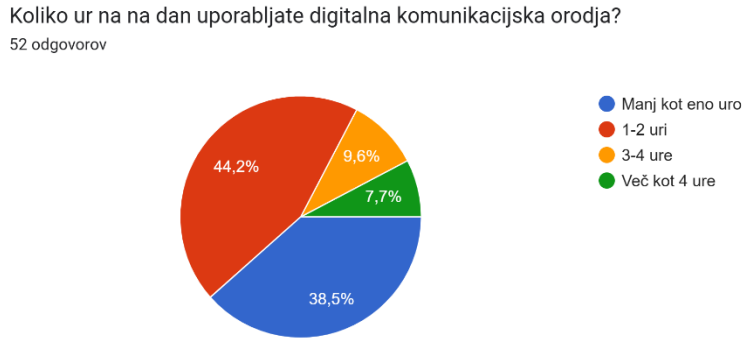
Regarding the use of digital devices, all participants (100.0%) reported using a smartphone. Additionally, 34.9% use a computer or laptop, and 14.0% use a tablet. None of the participants reported not using any digital devices.

How often do you use the internet?



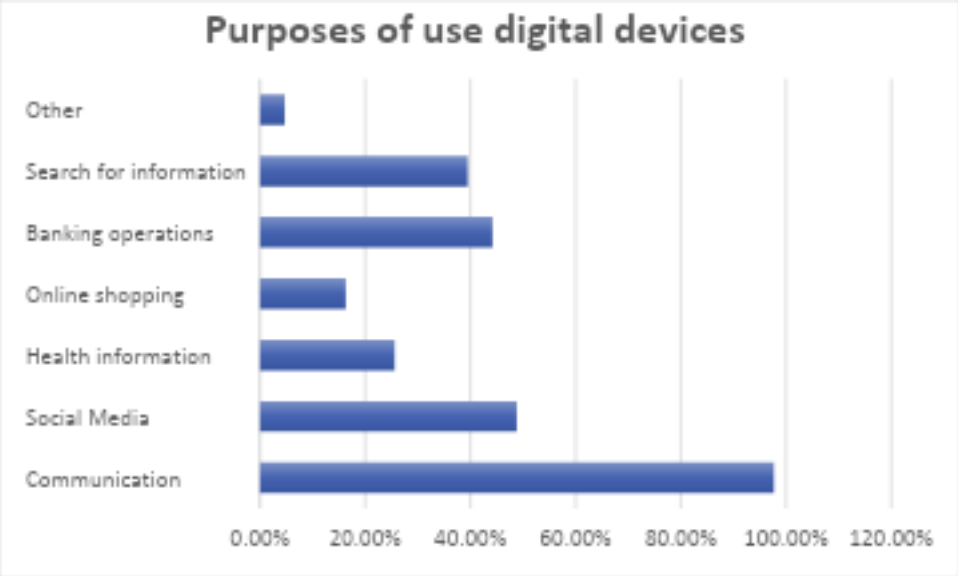
Data on the frequency of internet use shows that the majority of participants (57.7%) use the internet daily. Occasional use (1–2 times per week) was reported by 30.8% of respondents, while 11.5% indicated that they use the internet rarely (less than once a week). None of the participants reported never using the internet.

How many hours per day do you use digital communication tools?



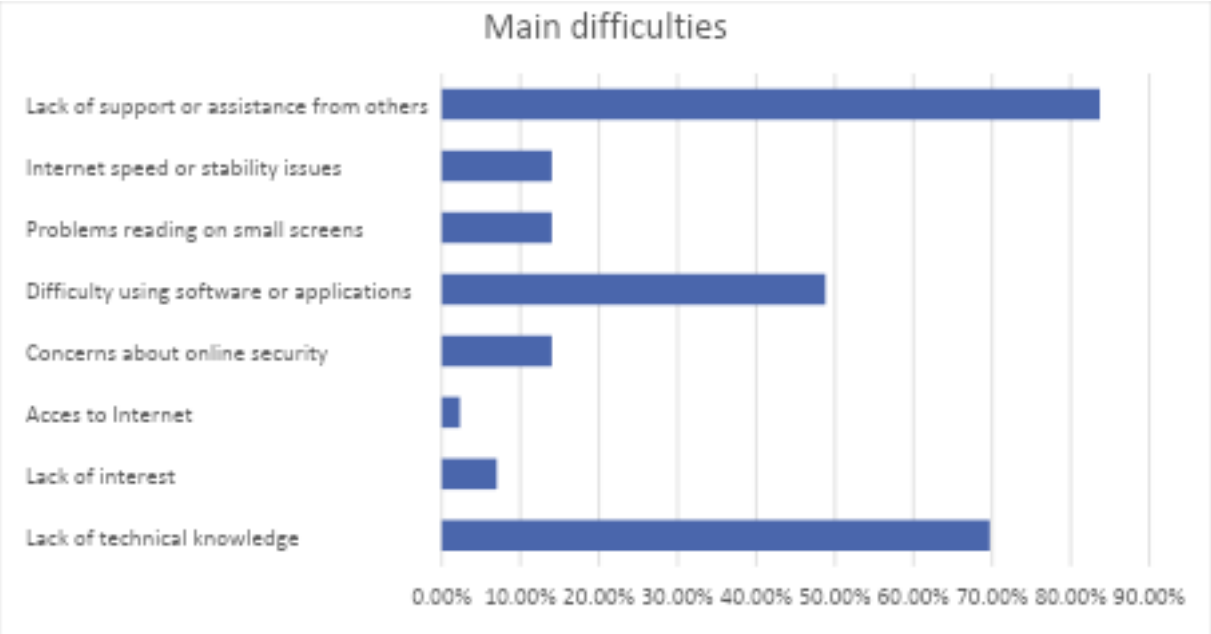
Regarding the duration of daily use of digital devices, the largest share of participants (44.2%) reported using them for one to two hours per day. This is followed by 38.5% who use digital devices for less than one hour daily. 9.6% of participants reported using them for three to four hours, and 7.7% use digital devices more than four hours per day, respectively.

For what purposes do you use technology?



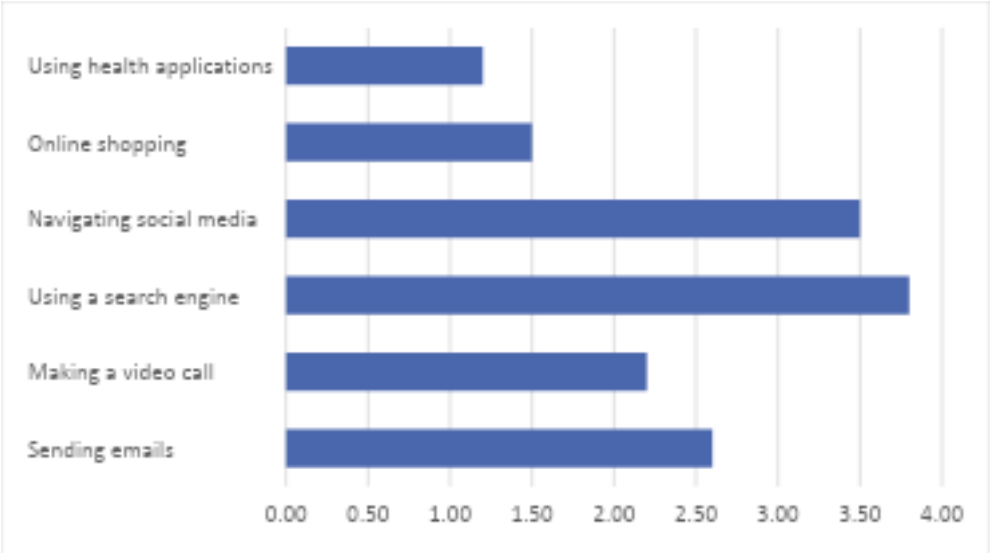
When it comes to the purpose of internet use, nearly all participants (97.7%) reported using it for communication. Almost half (48.8%) use the internet for accessing social media, 44.2% for banking operations, 39.5% for information searching, and 25.6% for obtaining health-related information. Online shopping was reported by 16.3% of participants, while 4.7% indicated other uses.

What are the main difficulties you face when using technology?



Participants reported various challenges in using digital technologies. The most commonly cited issues were the lack of support or assistance from others (83.7%) and a lack of technical knowledge (69.7%). Nearly half (48.8%) experienced difficulties in using software or applications. Concerns about online security, problems reading on small screens, and issues with internet speed or stability were each reported by 14.0% of respondents. A smaller proportion mentioned a lack of interest (7.0%) or limited access to the internet (2.3%).

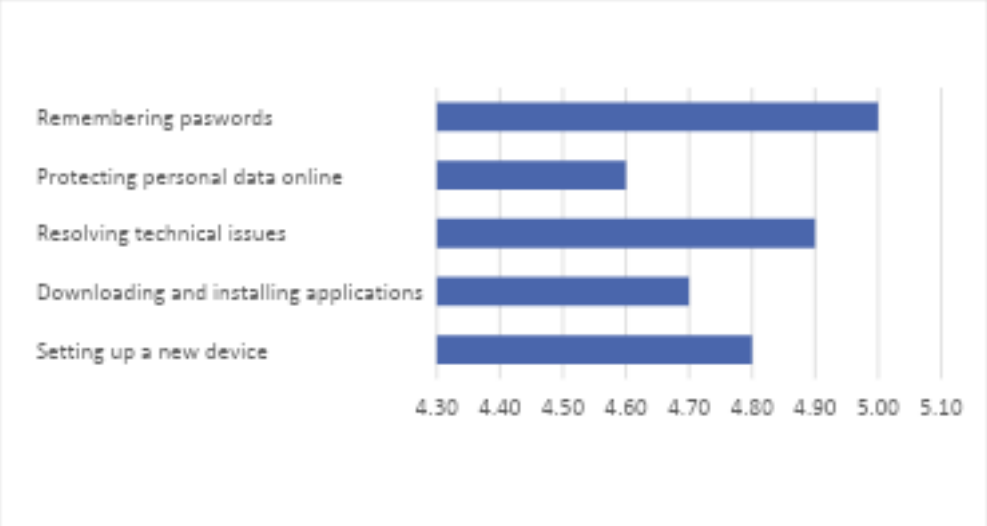
How competent do you feel in these activities?



The results show that among the listed digital activities, seniors feel **most confident using search engines (3.8)** and **navigating social media (3.5)**, indicating a basic level of comfort with finding information and staying socially connected.

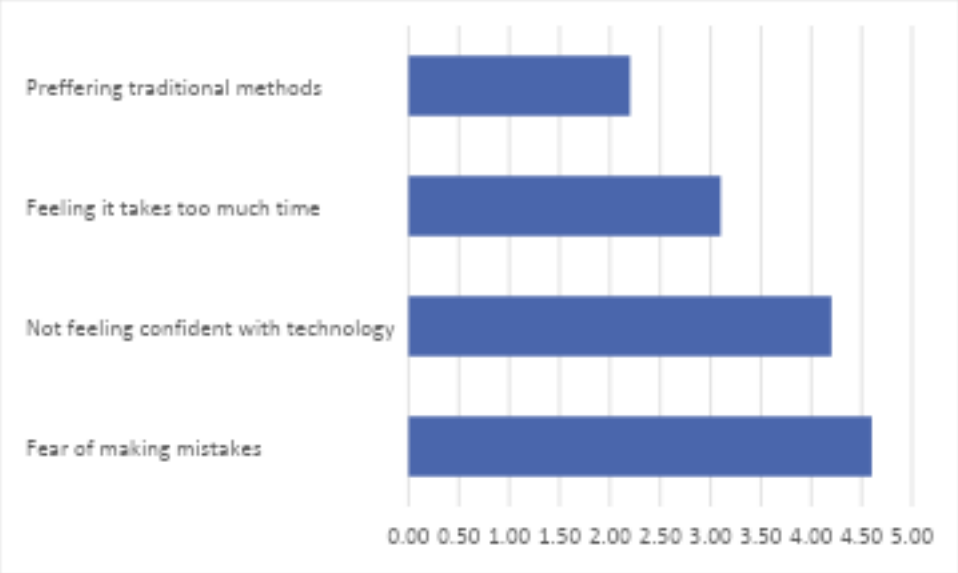
They feel **less competent when it comes to sending emails (2.6)** and **making video calls (2.2)**, highlighting a need for additional support with communication tools. **Online shopping (1.5)** and **using health applications (1.2)** received the lowest scores, pointing to a significant gap in digital literacy—especially in areas essential for everyday independence and well-being.

Have you ever faced difficulties with the following aspects of technology?



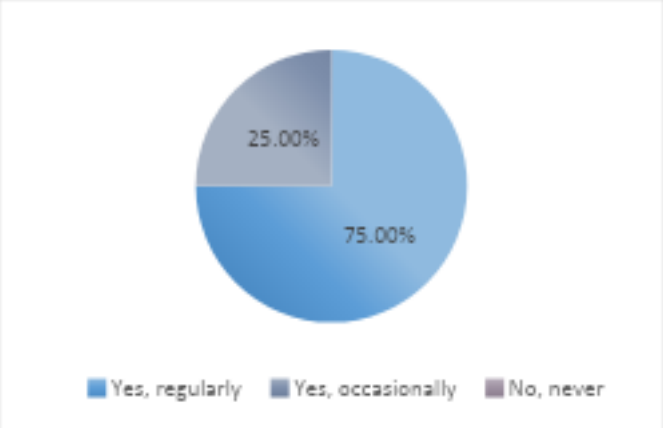
The results show that seniors experience significant difficulties with key aspects of technology. The most challenging tasks are **remembering passwords (5.0)** and **resolving technical issues (4.9)**, followed closely by **setting up new devices (4.8)** and **installing applications (4.7)**. Even **protecting personal data online** is rated as highly difficult (4.6). These findings highlight a clear need for targeted support and training in basic digital skills to help seniors navigate technology more confidently and independently.

How often do you avoid using technology due to the following reasons?



The data shows that seniors most often avoid using technology due to a **fear of making mistakes (4.6)** and **lack of confidence (4.2)**. These emotional barriers are much more influential than practical ones, such as the **feeling that it takes too much time (3.1)** or a **preference for traditional methods (2.2)**. This suggests that seniors are not resistant to technology itself, but need more support in building trust, confidence, and a safe environment to learn without fear of failure.

Do you receive support when using technology?



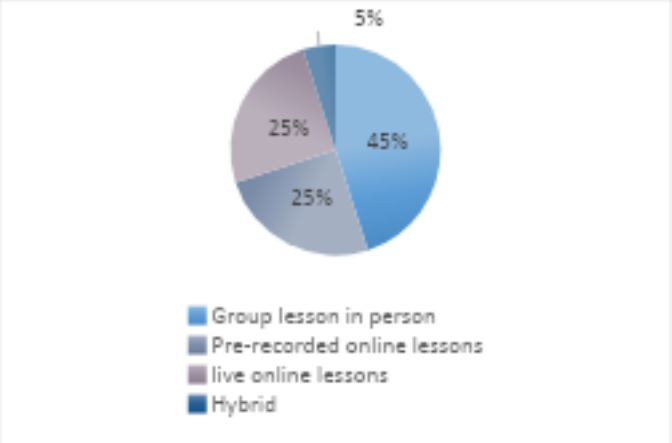
When asked whether they receive support when using technology, **75% of seniors reported receiving help regularly**, while **25% said they receive support occasionally**. Notably, **none**

of the participants reported being completely without support. This highlights the importance of having access to consistent assistance, which clearly plays a key role in helping seniors engage with digital tools more confidently and frequently.

Who do you receive support from?

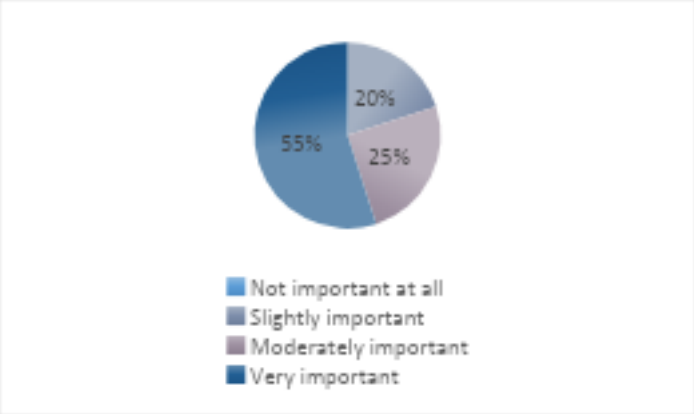
Based on the data, the majority of older adults receive support from family members (75%) when using digital tools. A smaller percentage rely on professionals or experts (25%), while 20% turn to friends for help. Notably, none of the respondents reported receiving no support at all. This suggests that older individuals typically have access to some form of assistance, with family members playing the most significant role in helping them navigate digital technologies.

If you had the opportunity to attend a course to improve your digital skills, what format would you prefer?



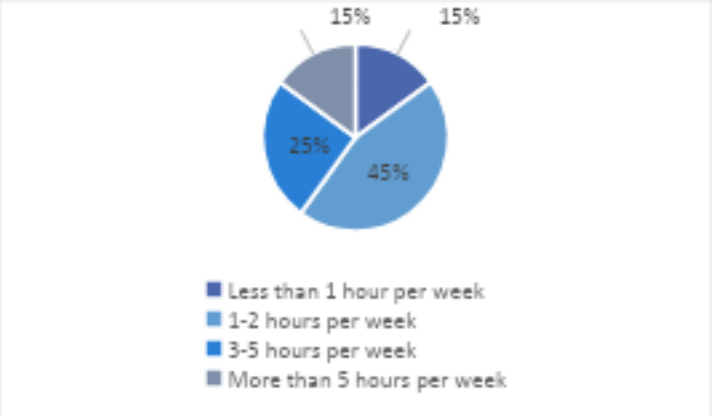
The data shows that the most preferred type of course among older adults is group lessons in person, chosen by 45% of respondents. Pre-recorded online lessons and live online lessons are equally preferred, each selected by 25%. Only a small portion, 5%, expressed a preference for a hybrid learning format. This suggests that many older adults still value face-to-face interaction when learning, although a significant number are open to digital learning options as well.

How important do you find improving your digital skills?



According to the data, a majority of older adults (55%) consider improving their digital skills to be very important. Another 25% find it moderately important, while 20% view it as only slightly important. Notably, none of the respondents believe it is important at all. This indicates strong overall recognition among older adults of the value and relevance of enhancing their digital competencies.

How much time are you willing to dedicate to improving your digital skills?



The results of the survey show that most respondents are willing to invest a moderate amount of time in developing their digital competencies. A majority of 45% indicated they would spend 1 to 2 hours per week on improving their digital skills, while 25% are ready to dedicate 3 to 5 hours. Interestingly, only 15% are willing to commit more than 5 hours per week, and the same percentage would spend less than 1 hour. These findings suggest that while most individuals recognize the importance of digital skills, they currently have limited time available to invest in their development.

What is the main motivation driving you to improve your digital skills?

The survey results for the question "What is the main motivation driving you to improve your digital skills?" reveal that the majority of respondents are primarily motivated by social reasons. A

significant 70% indicated that their main motivation is communication with family and friends. Meanwhile, 25% aim to improve their digital skills to better manage daily activities, and only 5% are driven by personal interests or hobbies. Notably, none of the participants cited work or professional needs as their main motivation. These results highlight the strong role of personal and social connections in encouraging digital skill development.

Summary of findings

The combined findings from focus groups and questionnaires highlight key challenges and needs of older adults in relation to digital technology. Participants came from a variety of professional backgrounds, with the majority having worked in industry and manufacturing (38.5%), followed by public administration (15.4%), education (11.5%), 9.6% worked in public services, 1.1% in NGOs, and other fields (4.7%). This diverse background, with a strong technical and practical orientation, influenced their familiarity with digital tools.

Most participants reported difficulties with password management, English-language terms, and frequent interface changes. Many relied on family members for support, which sometimes led to a sense of dependency and frustration. Emotional responses included anxiety, confusion, and fear of making mistakes, but also pride and increased confidence when succeeding on their own.

In terms of learning preferences, participants emphasized the need for clear, step-by-step guidance, delivered in Slovenian, with visual aids and repetition. Small group workshops were valued for peer support, while many also expressed the need for individual help. Practical skills—such as messaging, online banking, and filling out forms—were seen as the most relevant.

Despite challenges, the majority expressed strong motivation to learn, with **70% stating that communication with family and friends** is their primary reason for improving digital skills. Additionally, **25% were motivated by the desire to simplify daily activities**, while only a small portion mentioned personal interests (5%) or professional needs (0%). This indicates that **social connection and everyday functionality** are the main drivers of engagement. When it comes to time investment, **45% were willing to dedicate 1–2 hours per week**, and another **25% were ready to spend 3–5 hours**, showing a solid commitment to learning even in later life. These findings underscore that older adults view digital skills as essential for maintaining **independence, confidence, and social inclusion** in everyday life.

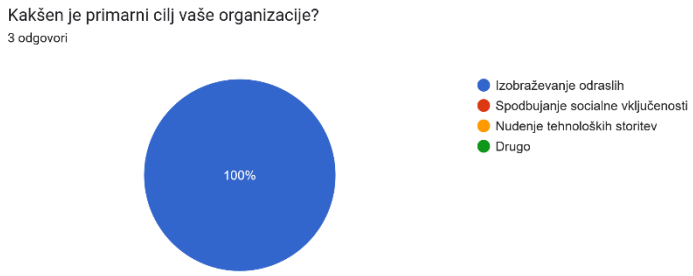
5. Organisations' Findings

General Information

More than ten organizations were invited to take part in the questionnaire aimed at gathering insights into their experiences and practices related to adult education and digital inclusion. However, only three organizations responded. Despite the low response rate, all three participating organizations are actively involved in adult education, with a strong focus on supporting learners with fewer opportunities, including older adults. Their input provided valuable perspectives on the challenges faced by educators as well as on effective approaches to digital skills training. These insights, although limited in number, complement the findings from the focus groups and help build a clearer picture of the broader adult learning landscape.

Organisations' Questionnaires & Focus Groups Findings

What is the primary objective of your organization?

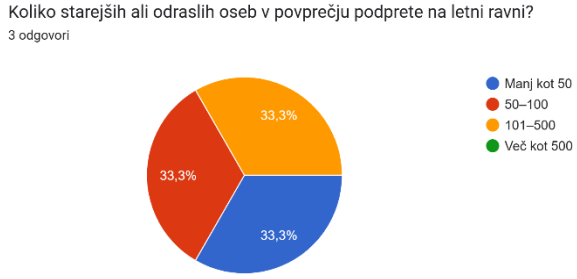


The response to the question "What is the primary objective of your organization?" shows a clear and unified focus: 100% of respondents indicated that providing educational support is their main goal. No participants selected promoting social inclusion or offering technological services as their primary objective.

What types of services do you offer to adults and seniors?

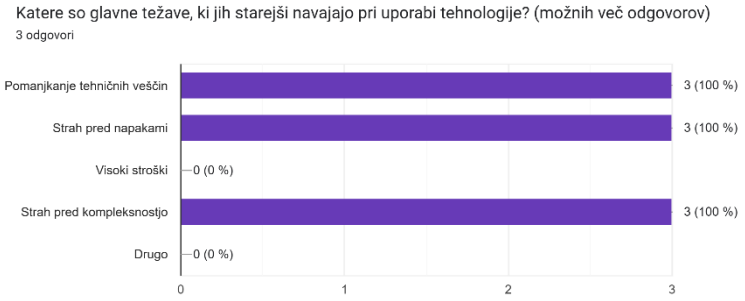
In response to the question "What type of services do you offer to adults and seniors?", all participants (100%) reported offering **digital skills training** as their primary service. No respondents indicated providing technological assistance, social support, or other services. This emphasizes a focused approach on helping adults and seniors build their digital competencies through structured learning programs.

How many seniors or adults do you assist on average per year?



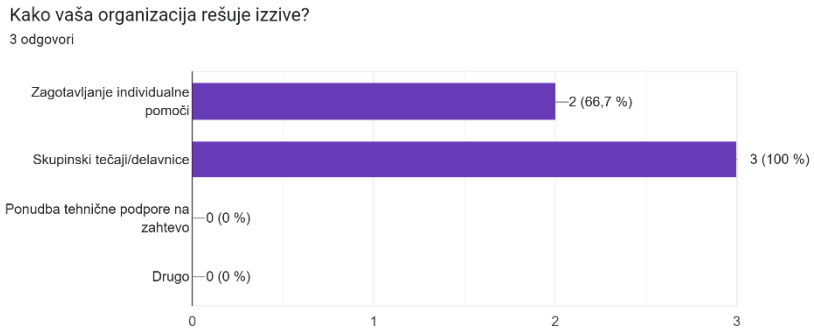
The responses to the question "How many seniors or adults do you assist on average per year?" were evenly distributed across the first three categories. **33.3% of organizations assist fewer than 50 individuals per year**, another **33.3% assist between 50 and 100**, and **33.3% support between 101 and 500** adults or seniors annually. Notably, none of the respondents reported assisting more than 500 people per year. This suggests that while the scale of support varies, most organizations operate on a **small to medium scale**, allowing for potentially more personalized and targeted assistance.

What are the main challenges seniors report when using technology?



The main challenges seniors face when using technology are consistently related to **a lack of technical knowledge, fear of making mistakes, and fear of complexity**, each cited by 100% of respondents. Interestingly, **high costs and other factors were not identified as significant barriers**. These insights suggest that the difficulties older adults experience are more **emotional and cognitive**, rather than financial, emphasizing the need for supportive, step-by-step learning environments that build confidence and reduce anxiety.

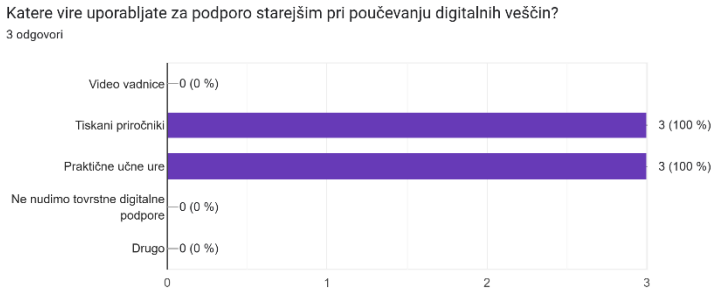
How does your organization address these challenges?



To address the challenges seniors face with technology, organizations primarily focus on **organizing group courses**, with 100% of respondents using this approach. Additionally, **66.7% provide individual training** to offer more personalized support. None of the organizations reported offering on-demand technical support or other services. This

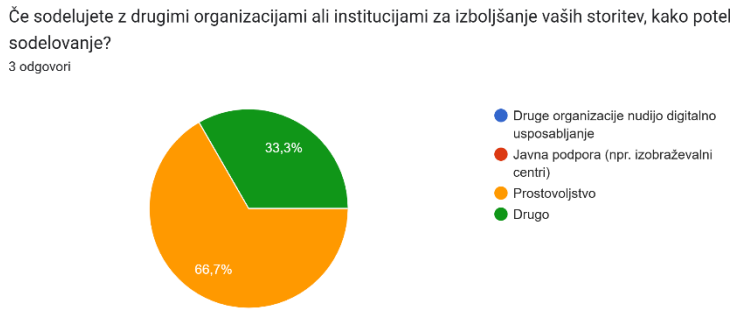
combination of group and individual learning helps create a supportive environment that caters to different learning needs and builds confidence among older adults.

What resources do you use to support seniors in learning digital skills?



To help seniors learn digital skills, organizations mainly use **printed guides and practical lessons**, with all respondents using these methods. They do not use video tutorials or other digital resources. This shows that seniors prefer easy-to-follow, hands-on materials that are simple and clear.

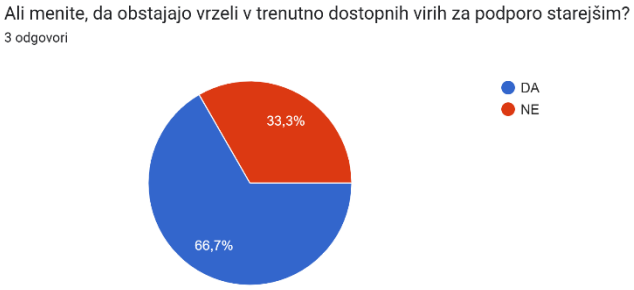
If you collaborate with other organizations or entities to improve your services, could you specify how?



Collaboration with other entities plays a role in improving services for seniors, with **66.7% of respondents relying on public support**, such as training centers and volunteers. Additionally, **33.3% reported other forms of collaboration**, while none indicated that other

organizations provide digital training directly. This suggests that partnerships are mostly focused on **logistical or volunteer support**, rather than shared delivery of training content.

Do you believe there are gaps in the currently available resources to assist seniors?



Most respondents (**66.7%**) believe that there are **gaps in the currently available resources** to assist seniors in learning digital skills, while **33.3% feel the existing resources are sufficient**. This indicates a general perception that **more tailored, accessible, or comprehensive materials** are needed to better support older adults in overcoming digital challenges.

The gaps mentioned by organizations highlight several key issues in existing resources for seniors:

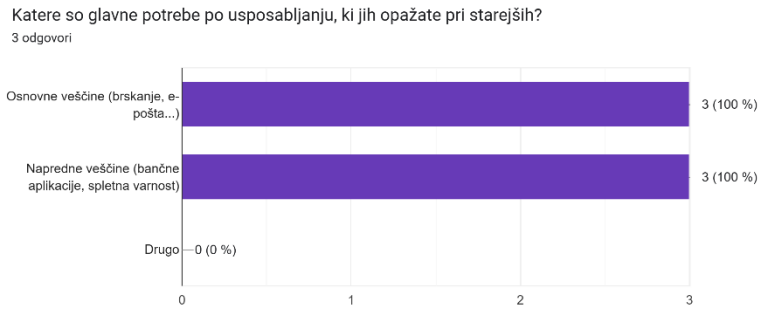
Many existing resources—such as video tutorials and online materials—are not adapted to the specific needs of older adults. They are often too fast-paced, use complex terminology, or assume a certain level of prior knowledge.

Older adults learn best through repetition and hands-on tasks, yet many current resources are overly theoretical and lack step-by-step, guided exercises.

A significant number of materials are in English or contain foreign terms, which can cause confusion and discomfort among older learners. Additionally, they often fail to include practical, everyday examples—such as how to order medication through the zVEM portal or how to use online banking.

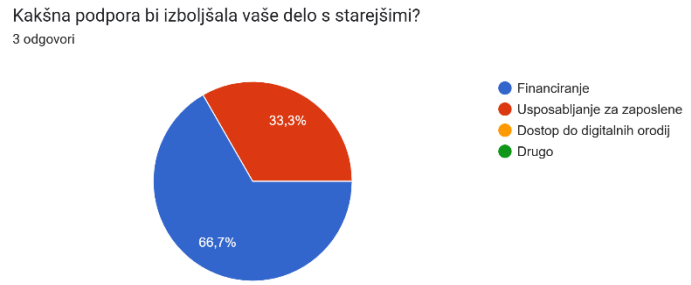
Even after attending workshops, many seniors lack access to simple materials for practice at home—such as printable cheat sheets, subtitled instructional videos, or personalized learning worksheets. These gaps highlight the need for more accessible, relatable, and structured learning resources tailored to older adults.

What are the main training needs you observe among seniors?



Organizations report that seniors have training needs across all levels of digital skills. **Basic skills**, such as navigating devices and using email, are needed by **100%** of participants. At the same time, **advanced skills**, including the use of **banking applications and understanding online security**, are also seen as essential by **100%**. This highlights that older adults require **comprehensive digital education**, from foundational knowledge to more complex, practical tasks relevant to everyday life.

What type of support could enhance your work with seniors?



Project Partners

To enhance their work with seniors, organizations identified several key areas of support. **Funding** was the most mentioned need, with **66.7%** of respondents highlighting it as essential. Additionally, **33.3% expressed the need for training for employees** to better equip staff working with older adults. No respondents indicated a need for access to digital tools, suggesting that the focus is more on **capacity building and financial resources** rather than equipment.

How important do you think technology is in improving the quality of life for seniors?

Organizations overwhelmingly view technology as a key factor in improving the quality of life for seniors. **66.7%** of respondents consider it **very important**, while **33.3%** see it as **moderately important**. None of the participants rated it as slightly or not important. These results reflect a strong belief that digital inclusion plays a crucial role in promoting **independence, social connection, and access to essential services** for older adults.

Would you be interested in collaborating on training programs specifically for seniors?

All respondents (**100%**) expressed a clear interest in **collaborating on training programs specifically designed for seniors**. This unanimous response highlights a strong willingness among organizations to work together in improving digital inclusion and developing tailored educational initiatives that address the unique needs of older adults.

What changes or improvements would you suggest to make digital services more accessible to seniors?

To improve the accessibility of digital services for older adults, organizations suggested several practical and user-centered changes:

- Large icons, high contrast, and adjustable font sizes to make interfaces more readable and visually accessible.
- Minimalist design with a focus on clarity and removal of unnecessary information.
- Clear navigation and fewer steps to reach essential functions such as “Send,” “Save,” or “Back,” reducing cognitive load and frustration.
- Printed and video guides specifically adapted for seniors, featuring large fonts, visual instructions, and a slower learning pace.
- Step-by-step instructional videos with Slovenian subtitles to support comprehension and independent learning.

In addition, respondents emphasized the importance of involving older adults in the development and testing of digital services. Engaging seniors in the design process and incorporating their feedback would help ensure that final solutions truly meet their needs and preferences.

These suggestions reflect a strong desire to create **inclusive, user-friendly digital environments** that empower seniors and reduce barriers to participation in the digital world.

Summary of findings

A thorough analysis of the survey and focus group results revealed important challenges, needs, and motivations of older adults regarding digital skills. Participants came from diverse professional backgrounds, primarily industry and manufacturing, agriculture, NGOs, and public administration, which influenced their level of technical literacy.

The main motivation for improving digital skills was communication with family and friends, followed by making daily tasks easier. Personal interests and professional reasons were less commonly mentioned. Most participants were willing to dedicate between 1 and 5 hours per week to learning, indicating a strong desire to acquire new knowledge.

The key challenges seniors face when using technology include a lack of technical knowledge, fear of making mistakes, and the perceived complexity of devices and applications. Emotional barriers such as confusion and anxiety are common, but successful independent use leads to feelings of pride and increased confidence.

Older adults prefer learning environments that offer clear, step-by-step instructions in Slovenian, supported by visual materials and repetition. Small group workshops and individual support are highly valued. Practical skills—such as messaging, online banking, and filling out forms—are seen as most relevant. Alongside basic skills, there is a strong demand for advanced knowledge related to app usage and online security.

Existing learning materials often do not meet seniors' needs; they tend to be too fast-paced, use technical jargon, or are in foreign languages, which causes confusion. There is also a lack of practical, everyday examples and accessible materials for practice after workshops, such as printed guides with large fonts and subtitled videos.

Organizations working in this field primarily focus on providing educational support through group courses and individual training. They assist varying numbers of seniors annually, from

fewer than 50 to over 100. However, two-thirds of organizations still believe that significant gaps remain in available resources.

To improve digital accessibility for older adults, organizations recommend larger icons, adjustable font sizes, high contrast, minimalist design, and clearer navigation with fewer clicks to reach key functions. Involving seniors in the design and testing of digital tools is also emphasized to ensure solutions truly meet their needs.

Overall, the majority of organizations recognize technology as an important factor in improving seniors' quality of life and express a strong willingness to collaborate on developing and delivering training programs tailored specifically to this group.

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Addendum: Focus Group findings from Slovenia

Introduction

As part of the Erasmus+ project *Generation Infinity – Enhancing digital skills, competencies, and safety in European older adults and seniors, a series of research activities was conducted in Slovenia to gain a better understanding of* the digital realities and needs of older adults aged 65 and above. The project, implemented between 2024 and 2027, aims to address the growing digital divide and equip seniors with essential digital skills to safely and confidently participate in an increasingly digital European society. As outlined in the project's overall goals, Gen-Infinity focuses on fostering digital inclusion, bridging intergenerational gaps, and improving the accessibility and quality of adult education through innovative and inclusive approaches.

Within the framework of Work Package 2 (Digital Senior Learning Feasibility Report & Train the Trainers framework), each partner conducted a national-level analysis to gather insights that would guide the development of tailored educational materials and strategies. In Slovenia, this phase involved the implementation of eight focus groups, divided into two target groups: four sessions with older adults (aged 65 and above) and four with adult educators working directly with this demographic. These qualitative consultations were conducted in February and March 2025 by Ljudska univerza Celje, the Slovenian partner in the project.

The focus groups with older adults explored their lived experiences with digital technology, including emotional responses, perceived barriers, current skill levels, and preferences for digital training formats. Participants shared their challenges with accessing e-services, communication tools, and digital media, as well as their concerns about privacy and online safety. At the same time, many expressed interest in learning, particularly when training is delivered in a supportive, patient, and practical way.

In parallel, the focus groups with adult educators provided valuable perspectives on the pedagogical challenges and opportunities when working with older learners. Discussions addressed existing gaps in digital curricula, the need for more customized methodologies, and the importance of building digital confidence through trust-based relationships. Educators also highlighted their own training needs, particularly in designing and facilitating inclusive and engaging digital learning experiences.

The insights gathered through these focus groups form the basis of this national report and will directly contribute to the co-design of the Gen-Infinity Digital Skills Curriculum (WP3), as well as the Train the Trainers framework. By identifying both learner and educator needs, this research phase aims to ensure that the final outputs of the project are deeply rooted in

real-life experience and capable of fostering digital inclusion in a meaningful and sustainable way.

Metodology

The Slovenian contribution to Work Package 2 of the *Generation Infinity* project was designed to gather qualitative insights into the digital competencies, attitudes, and training needs of older adults aged 65+ as well as the perspectives of educators working with this target group. The methodology was tailored to align with the project's overarching objective: developing effective and inclusive digital skills learning environments for older adults across Europe.

Research Design

A qualitative approach was employed, utilizing semi-structured focus groups as the primary data collection method. This approach allowed for rich, in-depth exploration of participants' lived experiences, perceptions, emotional responses, and preferences regarding the use of digital technologies.

To ensure triangulation of perspectives and address both learner and educator viewpoints, **eight focus groups were conducted in total**:

- **Four focus groups with older adults aged 65 and above**
- **Four focus groups with adult educators**, including digital skills trainers and professionals involved in non-formal adult education

The focus groups were held during **February and March 2025** in Celje. Each session lasted approximately **90 minutes** and included between **4 to 6 participants**. All sessions were moderated by experienced staff from **Ljudska univerza Celje** using a common interview guide developed within the project partnership. This guide included open-ended questions addressing digital skills, emotional experiences, training preferences, and perceived challenges.

Data Collection

Due to the sensitivities expressed by participants, especially the older adults, **no audio or video recordings were used**. Instead, moderators took detailed handwritten notes during

the discussions. Consent forms were signed at the beginning of each session. Participation was entirely voluntary.

Special care was taken to create a **safe and comfortable atmosphere**, encouraging participants to share their experiences without judgment or pressure. Moderators used supportive facilitation techniques to reduce anxiety, especially among those unfamiliar with speaking in group settings or uncomfortable with technology-related topics.

Participant Diversity

The older adult groups included participants with a range of digital proficiency, from near-novices to those with moderate confidence in using smartphones, messaging apps, or internet browsing. Socioeconomic, gender, and life experience diversity were also considered during recruitment.

The educator groups consisted of professionals with various roles in adult education, including instructors in computer literacy, trainers, and mentors for socially vulnerable populations. These participants were selected for their direct experience in delivering digital training to older learners and their ability to reflect critically on pedagogical strategies and learner engagement.

Data Analysis

All notes from the eight focus group discussions were transcribed and analysed using **thematic content analysis**. A combination of inductive and deductive coding was employed:

- **Inductive codes** emerged directly from participant responses (e.g., “fear of making mistakes,” “need for repetition,” “preference for group learning”).
- **Deductive codes** were informed by the project's theoretical framework and focus (e.g., digital safety, motivation to learn, accessibility).

The analysis identified recurring patterns across groups, as well as distinct contrasts between the perspectives of older learners and educators. Particular attention was paid to emotional expressions (frustration, pride, fear), types of digital activities (e.g., online banking vs. messaging), and learning preferences (e.g., tutorials, peer support, repetition).

These findings not only inform the Slovenian national report but will directly support the development of the project’s “Train the Trainers” framework and the “Gen-Infinity Digital Skills” curriculum. The combination of learner and educator input ensures that the project outputs will be both **pedagogically sound** and **relevant** for real-world application.

Key Findings from Focus Groups with Older Adults

The Slovenian focus groups with older adults (65+) revealed a consistent set of themes across participants regarding their experiences with digital technology. These include emotional, cognitive, and practical barriers, as well as clear preferences for future learning formats. The findings are structured into five key thematic areas, supported by direct quotes from participants.

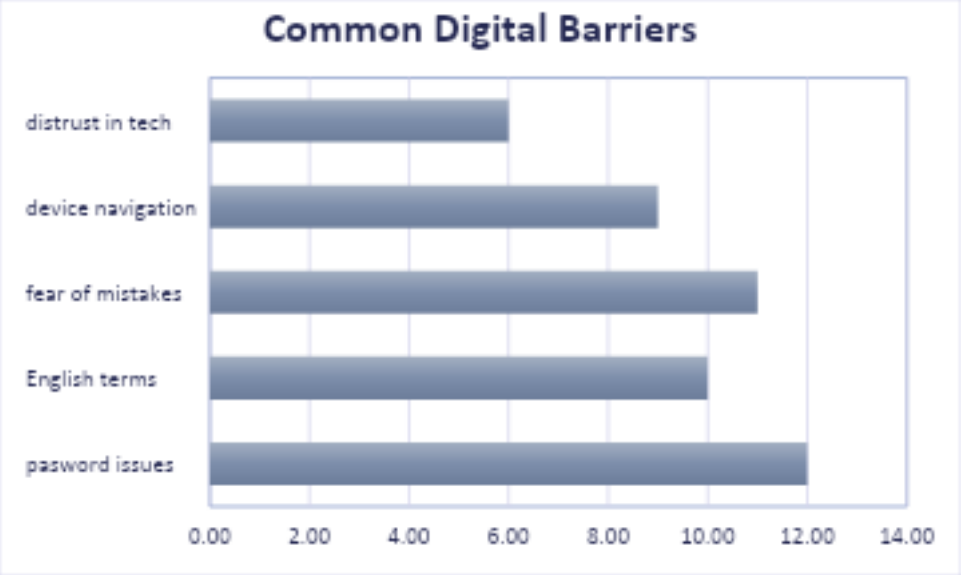
Digital Barriers and Difficulties

Participants from all four focus groups reported struggling with fundamental digital tasks, with some being near-novices and others having limited but regular usage. Commonly reported difficulties included:

- **Password management**: Forgetting or losing track of passwords was nearly universal, causing stress and lockouts from accounts. Many participants still write passwords in notebooks but often forget where.
- **English-language interfaces**: English terminology in apps, settings, and websites created confusion and hesitation.
- **Fear of making mistakes**: Many feared making irreversible mistakes, especially in sensitive contexts such as online banking or government portals.
- **Low understanding of device navigation**: Several struggled with knowing where files are stored, how to update apps, or how to use video calls or attachments.

“Every website asks for a new password, and I always forget them. Then I get locked out of my accounts.” – Marina, 74
“I don’t understand the terms. I hesitate because I don’t want to click the wrong button.” – Zdravko P., 71

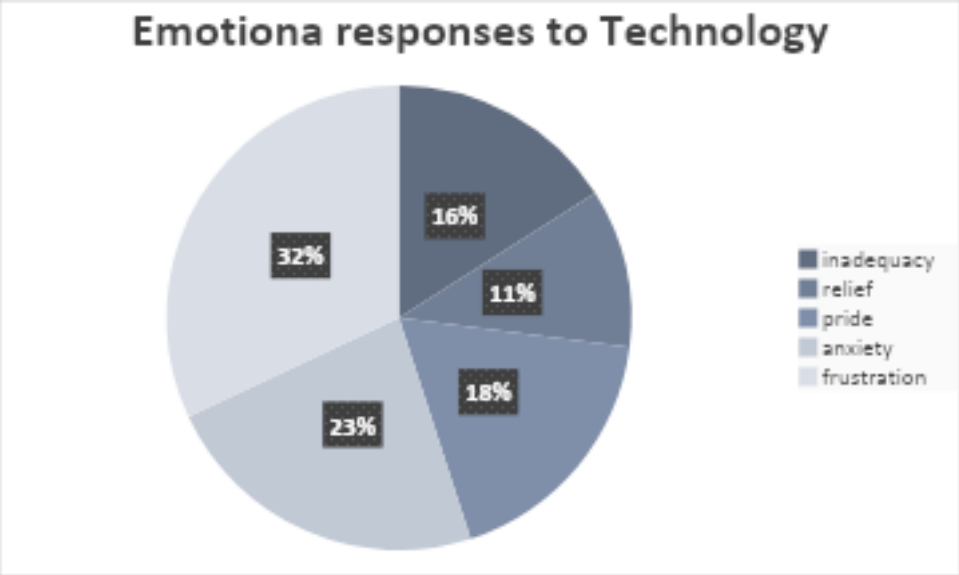
Emotional Reactions to Technology



The emotional component of digital exclusion was a powerful theme:

- **Frustration, anxiety, and nervousness** were widely reported, especially when tasks could not be completed or when participants had to ask for help.
- **Insecurity and feelings of inadequacy** emerged from comparisons with younger generations or faster learners.
- **Pride, joy, and relief** accompanied the successful completion of digital tasks, no matter how small.

"When I can't complete a task, I feel stupid, and it makes me anxious." – Marina
"When I send an email by myself, I feel very proud." – Gabrijela, 75
"Technology is not made for people like me." – Lidija, 68



Digital Activities: Comfort vs. Challenge

Most participants reported basic comfort with **calls, SMS**, and sometimes **WhatsApp or browsing**. More advanced or multi-step tasks were widely perceived as difficult:

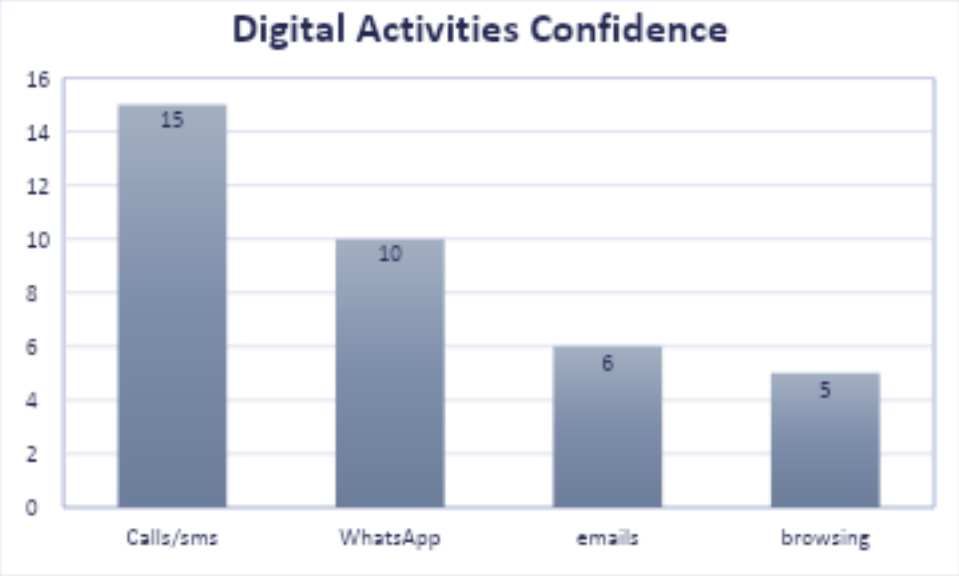
Activities participants feel confident in:

- Making calls and sending messages
- Setting alarms or using WhatsApp
- Basic web browsing and writing emails (among more active users)

Activities found challenging:

- Online banking and financial tasks
- Installing apps, system updates
- Attaching files or organizing content
- Making video calls (Zoom, Skype)

"I don't know where the files are stored on my phone or computer." – Gabrijela
"I'd love to know how to make a video call on my laptop." – Marina



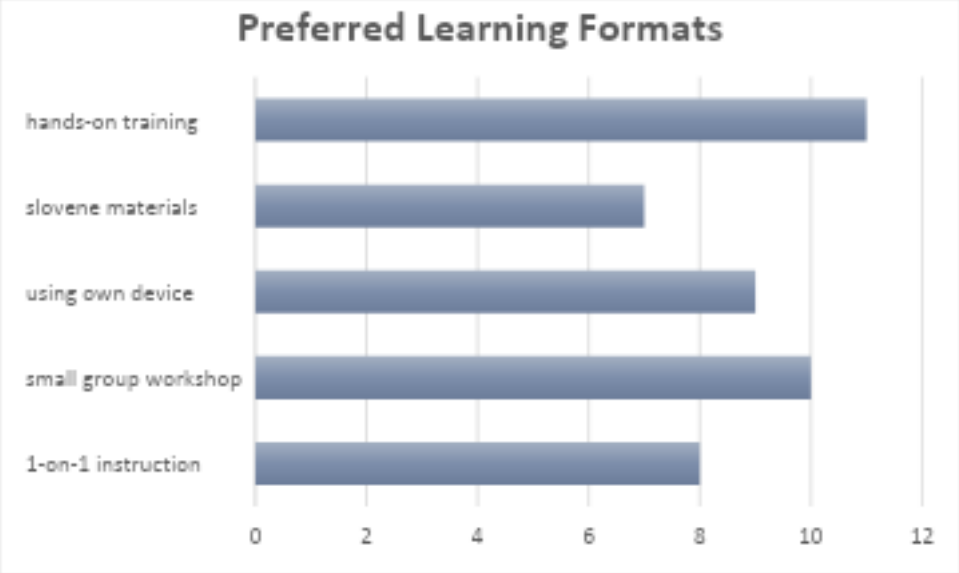
Learning Preferences

There was strong agreement about the need for **practical, hands-on training** offered at a **slow pace**, with **step-by-step explanations** and the possibility of asking questions.

Preferred training formats:

- **One-on-one instruction** (especially for more insecure learners)
- **Small group workshops** with peer support
- **Use of one's device** during training
- **Printed guides or Slovene-language tutorials** for reference
- **Digital repetition tools** (e.g., videos that can be paused and replayed)

“I need someone to show me step by step, using my device.” – Marina
“In groups, I feel like I’m too slow and that I’ll hold others back.” – Lidija
“I need to do things with my hands to remember them.” – Zdravko P.

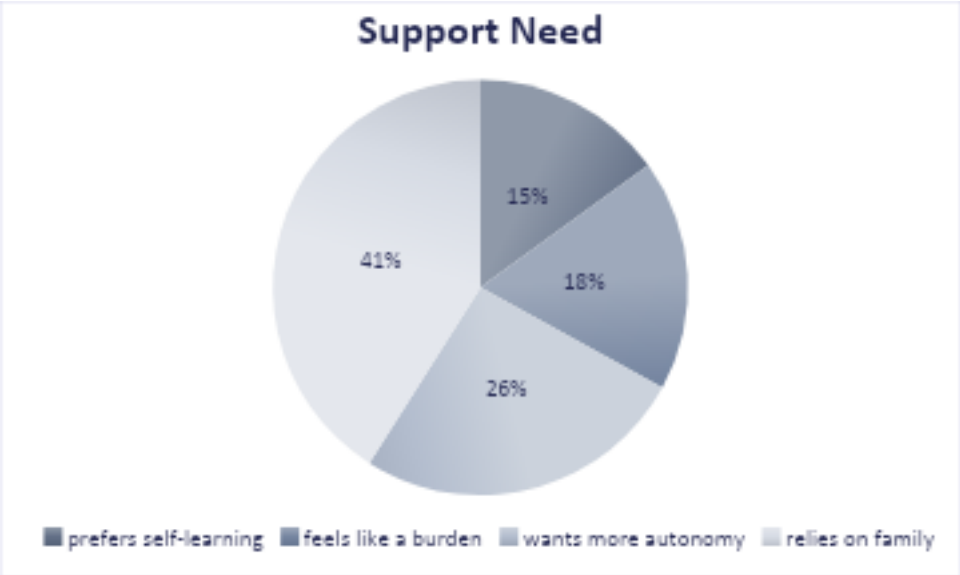


Support Systems and Autonomy

While many participants relied on family members, especially children and grandchildren, for digital help, this support was often seen as **impatient or insufficient** for long-term learning. Several expressed a desire to be **less dependent** and more autonomous.

- Participants felt reluctant to “bother” family with questions.
- Some shared that younger relatives tended to do things *for* them instead of teaching them *how*.

“I ask my grandchildren for help, but I feel like I’m bothering them.” – Gabrijela
“They just take the phone and do it themselves. That doesn’t help me learn.” – Zlatica



Key Findings from Focus Groups with Adult Educators

In Slovenia**, three focus groups** were conducted with **adult educators** who work with older adults to improve their digital literacy. The participants represented a variety of teaching contexts, ranging from entry-level to advanced digital courses, and shared their experiences, challenges, and teaching strategies. The goal was to gain deeper insight into the real-life barriers older learners face**,** as well as the pedagogical approaches that have proven most effective in practice.

The thematic analysis below summarizes the **most common challenges** identified across the groups.

Lack of Foundational Digital Knowledge

Many older adults begin digital courses with **little to no prior exposure** to digital technology. Even basic actions, such as moving a mouse, opening a browser, or saving a file, require detailed explanation. Educators noted that participants often lack the **mental model** of how digital systems work, which leads to confusion when switching between devices (e.g., smartphone vs. laptop).

"Some have never even held a mouse before."
"They don't understand what a file is, or where it goes after saving."

Language Barriers (English Terminology)

A recurring difficulty is the prevalence of **untranslated English terms** in software and applications. Words like *login*, *update*, *browser*, or *cloud* are not only unfamiliar, but can also create anxiety. Even when educators provide translations, the concepts often remain abstract.

"English words confuse them—even when translated, they don't feel real."
"They hesitate to click something if they don't fully understand the label."

Fear of Mistakes and Failure

Many learners express a strong **fear of "breaking something"** or making irreversible mistakes. This leads to hesitancy and avoidance. Educators highlighted that this emotional barrier often hinders experimentation and learning.

"They're afraid they'll delete something important."
"One error and they shut down emotionally—it's hard to rebuild confidence."

Low Motivation and External Pressure

Some participants join courses not out of personal interest, but because family members or caregivers encouraged them. This lack of **intrinsic motivation** can result in low engagement or frequent absences. Learners may not see the value of digital skills for their daily lives.

"They often say, 'I'm too old for this.'"
"You can tell when someone is there because their son signed them up."

1. **Mixed Skill Levels Within Groups**

Educators often work with groups where learners have **vastly different levels of prior knowledge**. This makes it difficult to maintain a pace that suits everyone. While some participants struggle with typing, others are already exploring more advanced apps.

"It's hard to keep everyone engaged when the gap is so wide."
"Group work becomes frustrating for both beginners and more experienced learners."

Conclusion

The Slovenian feasibility study within the Generation Infinity project revealed significant digital gaps among older adults (65+) and highlighted essential pedagogical insights from adult educators. Older participants consistently reported emotional and practical barriers, such as fear of making mistakes, struggles with English-language interfaces, and low digital confidence. These were coupled with a clear motivation to learn, especially when instruction was supportive, patient, and hands-on.

Educators emphasized the lack of foundational digital knowledge among many learners, the difficulty of mixed-level groups, and the challenge of sustaining engagement in individuals not intrinsically motivated. Despite these obstacles, both groups expressed a strong interest in improving digital skills when appropriate methods and support structures are in place.

The findings underscore a strong need for tailored, inclusive, and emotionally sensitive approaches to digital education for seniors. Building trust, enabling autonomy, and supporting confidence are just as critical as the technical content itself.

Recommendations

Based on the findings of the Slovenian feasibility study, several key recommendations emerge for the design and implementation of future digital skills training for older adults.

First, training programs should prioritize personalization and emotional safety. Older learners benefit most from small group or one-on-one sessions that progress slowly and provide clear, step-by-step instructions. Using participants' own devices during training can significantly increase comfort and relevance. Emotional support is equally essential: many older adults experience anxiety or fear when using digital technologies, so trainers must foster a supportive and judgment-free environment that normalizes mistakes and celebrates small achievements.

Hands-on and practical learning should be the foundation of all training. Repetition and real-life application are crucial for memory retention. Providing Slovene-language printed guides and tutorial videos allows learners to review content independently at their own pace.

Language barriers remain a significant challenge, particularly due to the prevalence of English terms in digital tools. Training should include clear explanations and context-based translations of key terms, ideally supported by visual aids and analogies to make abstract digital concepts more tangible.

Educators themselves require support and upskilling. A targeted Train-the-Trainers program should be implemented to help adult educators develop inclusive and age-sensitive teaching strategies. Such programs should address how to manage mixed-ability groups and how to cultivate trust, patience, and learner autonomy.

Finally, training should be aligned with learners' real-world interests and needs. Courses that emphasize practical uses—such as communicating with family, accessing health information, or using e-banking—are more likely to foster intrinsic motivation. Where possible, integrating intergenerational learning opportunities, such as mentoring by young volunteers, can further enhance the learning experience while fostering community ties.

These recommendations aim to create a more inclusive, relevant, and sustainable approach to digital education for seniors, ultimately supporting their autonomy and participation in an increasingly digital society.