DIGITALIATORS - Digital upskilling for senior citizens, focused on their everyday necessary online transactions, especially after the pandemic

Project no. № 2022-1-BG01-KA220-ADU-000085900

Synthesis report

By UPI – ljudska univerza Žalec

UPI LJUDSKA UNIVERZA ŽALEC
šola prijaznih ljudi

Co-funded by
the European Union

Co-funded by the European Union

DIGI TALIAT<>RS

Table of Contents

1. RELEVANCE OF THE PROJECT 3
2. PURPOSE AND OBJECTIVES OF THE PROJECT 3
3. GENERAL OVERVIEW OF THE STATE OF DIGITISATION USE BY SENIORS AFTER THE COVID PERIOD 5
4. RESULTS OF A DESK RESEARCH CARRIED OUT BY COUNTRY 8
5. RESULTS OF THE TELEPHONE RESEARCH BY COUNTRY 10
6. CONCLUSION 11
7. REFERENCES 12

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

1. RELEVANCE OF THE PROJECT

COVID-19 brought many changes in our lives, causing serious and unprecedented problems. An age group that struggled and suffered quite a lot were seniors. Not only they found themselves scared and vulnerable in front of the pandemic, but also they felt lost in the occurring digitalisation of everything. Bills that had to be paid online, taxes, bank transactions, even booking the vaccine appointments, for a large part of the population was a hardship.

Since the beginning of the COVID-19 crisis, a major change occurred in the banking sector, concerning mainly cashless payments, be they in the form of contactless card payments or wire transfers via eBanking. On a similar scale, more and more shops and restaurants have been compelled to build on their e-commerce potential, as the need for online orders has seen an increase to the detriment of physical purchases. Although the positive effect that this strategy has had on the restriction of the pandemics, little importance has been noted on the general practicality of Internet banking and online payments in the modern era. Many senior members of our society turned to their children or even grandchildren for assistance. Yet, online transactions are now an established reality growing daily.

2. PURPOSE AND OBJECTIVES OF THE PROJECT

The main aspect of the project is the digital training, but fully focused on everyday transactions enabling people of age to be independent and gain competences, which will make their lives easier. In many European countries the digitalization of the state and bureaucratic procedures are today reality, and it is of course a great progress. But it is not so easy for everyone.

Changes and progress might be beneficial for younger people, but elders should not be left in their corner trying to figure out this new era.

Having thoroughly examined the roots of this problem, we seek to develop a comprehensive training on the most common features and critical points of modern-day online transactions, as well as national information systems that are in place for bureaucratic issues, by emphasizing on the benefits and the practicality of their use, as well as the potential risks and areas of attention that need to be considered. We particularly hope that this project will encourage governments in Europe to mobilise their citizens toward the use of such software by launching relevant nationwide promotional campaigns, such as commercials or public workshops for audiences interested in bettering themselves in that sector.

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

The main objective of the DIGITALIATORS project is to address the digital transformation of society and services offered by both the public and the private sectors of the economy through developing and offering high quality, flexible learning materials to senior citizens and adults facing problems because they don't know how to use the internet applications that would make their lifes easier. This lack of digital knowledge and skills provokes them stress and the feeling they are excluded.

More concretely, **the specific objectives** of the DIGITALIATORS project are:

1. To define the needs of senior citizens in all participating countries by detecting the level of competence of seniors, to map the most common online transactions in each country as well as to reveal the reasons hindering senior citizens from using and trusting online procedures.

2. To develop high quality capacity building learning material for senior citizens, designed specifically to meet their needs as far as their online transactions are concerned.

3. To test the learning material produced in all participating countries in order to gather feedback from seniors, observe their progress and make the necessary corrections and adjustments.

In this synthesis report, we will focus mainly on the first point of the intellectual outcome, namely the country-by-country research on the current state of digitalization rates among seniors, their experience of digitalization, and how each country is set up to help seniors with their daily online transactions, especially after the Covid pandemic19. In the second part, we will present the findings of the research, which focuses on a telephone survey of seniors on their use of online transactions, the advantages they see in digitalization, the disadvantages and the problems they face. We will also add individual reports under the country-specific research (desk research and phone call research - https://digitaliators.eu/wp2/), where you can read in more detail about the individual research by country.

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

3. GENERAL OVERVIEW OF THE STATE OF DIGITISATION USE BY SENIORS AFTER THE COVID PERIOD

The COVID-19 pandemic has reduced social contact for many people due to physical distance and confinement, leading to feelings of social exclusion and loneliness (Berg-Weger and Morley, 2020; Murthy, 2020). These precautionary measures, taken by many countries around the world while working to reduce the spread of COVID-19, have prevented many from meeting their physical, emotional and social needs through services and support (Morrow-Howell et al., 2020). Older adults in particular were excluded during the pandemic, resulting not only in reduced physical contact but also in digital exclusion (particularly pronounced among non-users), leading to segregation from a society dominated by the internet and other digital technologies (Seifert et al., 2021). This exclusion has led to a sense of 'left behind' for some, as the pandemic has shifted social events and service provision to online platforms, further accentuating the digital divide (Seifert, 2020).

Before the pandemic, some older adults may have faced double exclusion due to **a lack of digital literacy and social interaction**, but the shift to almost all aspects of online life caused by the pandemic has increased the need for greater digital connectivity (Vargo et al., 2020). In particular, for those older adults who self-identified as non-users, the pandemic brought triple jeopardy (**exclusion**), as they were more likely to die from COVID-19 infection, less likely to obtain quality information, food, supplies or services online, and more likely to experience isolation and loneliness (Xie et al., 2020). While some elements of the triple exclusion (the consequences of viral infection) are age-related, others are rooted in the inability of non-users to access social connections and vital goods and services in an increasingly online environment. This triple exclusion experienced by many older adults during the COVID-19 pandemic widens the digital divide (DiMaggio et al., 2001), revealing new ways in which COVID-19 has further challenged and excluded older adults from society. In addition, the COVID-19 virus itself created new challenges for this subgroup of the population, as infection with the virus led to potentially harmful consequences for older individuals (Mueller et al., 2020), further increasing the importance of the use of online tools and resources, while at the same time, in line with the concept of 'triple exclusion', further isolating older people who were not users of digital technology. (https://www.sciencedirect.com/science/article/pii/S259029112300116X).

Older adults who were not users of digital technology were more likely to be socially excluded at a time of physical distance (Xie et al., 2020). As older adults are more likely to be socially isolated than younger adults in general (Merchant et al., 2020), this risk increased when physical distance

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

measures required individuals to isolate themselves from everyone outside their household. To counteract feelings of isolation and loneliness during the COVID-19 pandemic, the literature suggests that the use of digital technology has increased significantly among older adults (Haase et al., 2021; Shan et al., 2020; Weil et al., 2021). While some older adults started to use technology more regularly for the first time during the pandemic, some older adults started to use technology differently in order to stay connected with others and engage in meaningful activities (Haase et al., 2021). Being digitally connected was no longer an opportunity to stay up-to-date, but became "fundamental to promoting equity and social inclusion among the older adult population in the context of the pandemic and its aftermath" (Ramos Garcia et al., 2021, p. 198).

For many non-users of the internet, the pandemic has become a catalyst for adoption and use, connecting them to friends, family and communities at a time when face-to-face interaction was limited (Chen et al., 2021). Scientists have referred to this as a 'sink or swim' moment for non-users, when digital technology such as the internet became essential for accessing services and support (Morrow-Howell et al., 2020). For example, Elimelech et al. (2021) found that older adults observed a greater willingness to engage with digital technology during the pandemic if it was for social, leisure or educational activities. This increased use of technology through smartphones and tablets, for example, helped older people to avoid feelings of exclusion and insecurity and to maintain social networks. (https://www.sciencedirect.com/science/article/pii/S259029112300116X).

Training in digital skills that promote social inclusion is therefore a priority and is included in the social policies of the main international bodies. For example, one of the key objectives of the European Union's Lifelong Learning Programme is to **promote active ageing and intergenerational relations** through the learning and acquisition of digital skills in formal, non-formal and informal settings. Meanwhile, socio-educational content should also be promoted to train older people and professionals and carers in basic competences relating to activities of daily living (ADLs), such as personal hygiene and nutrition, among others, and in instrumental activities of daily living (IADLs), which include activities related to independent living (using an ATM, transferring money online, using a mobile phone, etc.). Various technological projects thus offer websites and social blogs, social mentoring projects based on virtual platforms, social networks, etc., which aim to ensure a truly active ageing, optimising opportunities for health, participation and security and, ultimately, improving quality of life in old age [6,20].

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

3.1. Challenges and opportunities of digital technology use in older adults

Although digital technology is a fundamental component of today's society, some older adults have only limited engagement with technology (Faverio, 2022). Factors such **as lack of experience and knowledge, limited access** (Reneland-Forsman, 2020), **hesitancy** to try new technology (Quan-Haase et al, (Gatto & Tak, 2008) and **cognitive/physical decline** (Berkowsky et al., 2018) can affect older people's interaction with digital technology and may further widen the gap (Carvalho et al., 2012). **Community environments and physical environments** can also discourage people from using digital technology. For example, rural environments can exacerbate challenges, whether due to problems with internet connectivity, high costs or access to broadband internet, or limited learning opportunities (Berg et al., 2017; Ryser & Halseth, 2012; Warburton et al., 2013).

Lack of digital literacy may negatively affect some older people's views on the use of digital technology (Berkowsky et al., 2018). As this subgroup of older people lacks the skills needed to successfully adapt to certain digital technologies, they may need support to compensate for their lack of digital literacy. For many, their participation in digital technology can be characterised as 'borrowed' (Reneland-Forsman, 2020), whereby they rely on other people to facilitate their adoption and participation in technology - relying on friends and family to provide them with the skills to use the technology or to use it on their behalf.

While some older adults face barriers to accessing and adopting technology in their daily lives, many others have bridged the digital divide (or not faced it at all) by adopting and using different forms of digital technology together with people of other age groups. Whether for social, instrumental or informational reasons (Szabo et al., 2019), many older people actively use digital technology and online services for reasons such as value, usability, affordability, accessibility, support, independence, experience and confidence, as do people of all ages (Lee & Coughlin, 2015). Specifically, older people are much more likely to consider using digital technology if they consider it **a positive and necessary addition to their lives** (Berkowsky et al., 2018). For example, the use of telemedicine systems (tele-visiting and tele-rehabilitation) – an use of electronic information and communications technologies to provide and support health care when distance separates the participants - is and can be a very positive contribution to the quality life of the elderly.

Digital technology can be an asset for older people, enabling groups and individuals to increase **social cohesion, capacity and social participation** (Warburton et al., 2013). For example, the Internet and online platforms and services have provided older adults with convenience,

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

connectivity and social cues that create opportunities for a variety of interactions (Wellman et al., 2003), while expanding social networks and enabling the bridging of geographical distances between family and friends (Warburton et al., 2013). Digital technology can also facilitate social inclusion, personal independence and learning (Hill et al., 2015), enabling older adults to compensate for any loss of mobility and lifestyle changes that may be associated with ageing and old age (McMellon and Schiffman, 2002).

4. RESULTS OF A DESK RESEARCH CARRIED OUT BY COUNTRY

In order to investigate what is the situation and needs of seniors as far as most common on-line interactions they need to perform as well as what are applications related to them in use in each participating country, a desk research was carried out. Research and mapping of common online transactions of senior citizens was performed in Bulgaria, Slovenia, Cyprus, Greece, Italy and Romania.

Based on the reports of individual countries listed below, we can see that **digital technology is very present in daily life of people in general**. The void exists, particularly among older generations. Many seniors are using technology for communication, learning, and accessing services. Nevertheless, they face a major challenge in terms of digital literacy, access, and concern for online security. This became a big concern in the time of COVID-19 pandemic which highlighted the digital divide among older people. **The biggest issue is probably access to health services**, which is crucial for older people.

In **Bulgaria**, e-government service is a bit behind, but in recent years ICT use is quickly progressing. Elderly Bulgarians are increasingly adopting digital technology for communication, education, and accessing services. Many now own devices like smartphones and computers. Also, there are several projects to support digital literacy among the elderly: “Digital Bulgaria” Initiative, “Active generations” program, telecentres for social services etc.

Seniors in **Cyprus** are no exception. In fact, there is an improvement in the level of ICT use among the Cypriot population over the past. Cyprus is somewhere in the middle, compared to other countries, when it comes to ICT use among seniors on a weekly basis. They modernized and digitalized the government services, which was an issue for seniors, but they also are not so interested to attend educational programs. There are some educational programs, curriculum for teaching basic digital skills to adults.

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

Italy's older population is becoming tech-savvy, the research showed that the over-50s are increasingly technological, mostly using smartphones, PC or a tablet. The main concerns of people are safety on the internet and lack of digital skills. In everyday life, technology is important for the majority of this segment of the population, but there remains some fear of social networks as tools that can increase the generation gap, as the over-50s do not know how to use technology to the full. There are some programs that aim to overcome what is called the "digital divide": SWAP (intergenerational exchange project between young and old aimed at improving the technological skills of older people), NonniSmart (20 free of charge videos that answer simple "digital questions" and offer continuous assistance).

Romania ranks poorly in digitalization compared to other EU countries, with significant urban-rural disparities. People in rural areas don't even have internet access. They notice a lack of basic digital skills, enabling the use of advanced technologies by both citizens and public employees. At country level, there are isolated initiatives to promote digital literacy for seniors, but they seem to be insufficient for the scale of the needs identified. What is important is that awareness is growing and, albeit with small steps, progress is being made. One such example is a project – a programme for the development of digital skills among seniors in Cluj-Napoca, where volunteers were involved as well in order to help seniors using the internet.

Slovenia is among the most developed countries at EU level in terms of household ICT equipment and has decent overall ICT use, but its older population is falling behind. The percentage of older people who have never used the internet is quite high (31% of the population said they had never used the internet, slightly higher than the European average of 28%.), many have modest or basic skills (45 % of 65- to 74-year-olds lacked the necessary skills and knowledge to use ICT (the EU average, meanwhile, was 41 %). One good practice, worth mentioning, is a project "Digitalno vključen", which addresses the inclusion of older people through training on the use of devices and offers an online platform that contains self-learning videos in order to acquire functional digital skills, to learn how to use key e-services/programs on active and healthy ageing and enables intergenerational virtual meetings and networking.

In **Greece** many projects are being created to help the senior population to adapt to the digital world and to be able to respond to its demands. They notice a divide between rural and urban locations. There is still a lot to be done to reduce the divide between the elderly and the non-elderly population, despite efforts of several organizations (NGOs, associations), projects, educational centers and digital corners, peer-to-peer support, family and community service networks etc.

We need to provide education, accessibility, and support to ensure equal participation of seniors in the digital age. In each country there are programs and initiatives available to assist older people in using digital technologies.

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

5. RESULTS OF THE TELEPHONE RESEARCH BY COUNTRY

This report is a result of phone surveys on the subject: »Digital upskilling for senior citizens, focused on their everyday necessary online transactions, especially after the pandemic«. We talked to specific groups of seniors in different countries, who were required to respond to various inquiries regarding e-services, their utilization, and their perspective on the matter of digitalization.

The survey was carried in Greece, Slovenia, Italy, Romania, Cyprus and Bulgaria. People who participated were aged between 55 and 90, their total number being **168 participants**. Most interviewees were women, namely 68 %. Education level of participants was mostly secondary school (73 %) or higher education. The survey referred to various areas related to the use of digital technologies.

IT TOOLS KNOWLEDGE

The majority (78 %) of the respondents regularly use IT tools: a smartphone (71 %), many have experience also with PC (45 %), tablet (24 %) or laptop (27 %). Services they use online are mostly connected to healthcare, banking, and shopping. They usually don't use e-services because they don't know how to use it, or they are afraid of doing something wrong. Sometimes they think they are too old for this, and they also don't want to bother their relatives and ask for help. Others do ask for help, so they don't need to learn it. They are also afraid of frauds.

They see solution in learning digital skills, basic internet skills and how to operate safely online, some also want to learn English. Interviewees also want to learn how to use social media, take and share photos, use Bluetooth. Minority of older people are completely confident and find their way around new digital technologies easily.

COMMUNICATION AREA

The majority (80 %) of older people have an email address and can independently send an e-mail (66 %), while some need assistance with sending and receiving them. They get help from younger relatives.

Most (53 %) of the social media users use Facebook. A small proportion also use Instagram. However, a large proportion of respondents do not use any social network. They mostly use social networks to scroll through but downloading/uploading or sharing a file is something that approximately half of the interviewees doesn't know how to do.

INFORMATION SEARCH AREA

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

Half of people asked said they could find what they were looking for on the Internet without help, while the other half said they would need help. More often than not, they also have problems with archiving and retrieving information from the web. In general, they are not really interested in e-service updates.

SECURITY AREA

Interviewees rarely change the passwords they use; they are not so concerned or aware of security issues which come with digital technologies. More than a half of interviewees use password or a code to unlock the phone.

6. CONCLUSION

Through detailed surveys and telephone interviews, we can see that seniors have a problem with digitalisation, find it difficult to keep up with new developments and need help from family, friends and relatives. They are aware that digitalisation is here and that they will have to adapt to it, as more and more of both health orders and administrative affairs are now done online. But in learning to do this, they need the help of someone who understands their needs and is patient with them.

Following the results and information provided by desk research and phone research, several directions have crystallized that should be addressed in the focus groups with seniors and trainers specialized in the digital area.

First of all, the direct, general experience with the digitalization phenomenon in order to understand the broader way of reporting on these changes.

Secondly, what are the applications and tools used, as well as the reasons behind using them, for a concrete overview.

Thirdly, what are the applications and tools that seniors want to use to cover practical needs, what are the requirements and limitations encountered from their own experience, but also from the experience of other people, in order to advance in the use of digital technologies.

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

Fourthly, what are the training needs, what would need to be taught, from their perspective, to be able to understand and use other digital tools independently.

Fifthly, what should and should not be included in a digital literacy course for seniors, as well as what would be the most suitable teaching methods for the most effective results.

Sixth, what should be the approach to attract as many seniors as possible to the digital area and what should be categorically avoided in the approach to digitization courses for seniors.

7. REFERENCES

- https://www.sciencedirect.com/science/article/pii/S259029112300116X
- Berg-Weger and Morley, 2020 (Loneliness and social isolation in older adults during the COVID-19 pandemic: Implications for gerontological social work)
- Berkowsky et al., 2018 (Factors predicting decisions about technology adoption among older adults)
- Chen et al., 2021 (Reactions to COVID-19, information and technology use, and social connectedness among older adults with pre-frailty and frailty)
- DiMaggio et al., 2001 (The Internet's effects on society) Annual Review of Sociology (2001), p. 27¸307
- Elimelech et al., 2021 (Impact of the COVID-19 pandemic on older adults: Rapid review)
- Gatto and Tak, 2008 (Computer, internet, and e-mail use among older adults: Benefits and barriers) Educational Gerontology, 34 (9) (2008), pp. 800-811
- Hargittai et al., 2019 (From internet access to internet skills: Digital inequality among older adult)
- Hill et al., 2015 (Older adults' experiences and perceptions of digital technology: (Dis)empowerment, wellbeing, and inclusion)
- Moore and Hancock, 2020 (Older adults, social technologies, and the Coronavirus pandemic: Challenges, strengths, and strategies for support) Social Media + Society, 6 (3) (2020), pp. 2-5

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

- Morrow-Howell et al., 2020 (Recovering from the COVID-19 pandemic: A focus on older adults

- Seifert, 2020 (The digital exclusion of older adults during the COVID-19 pandemic) Journal of Gerontological Social Work, 63 (6–7) (2020), pp. 674-676

8. Country results

Country-specific research can be found here: https://digitaliators.eu/wp2/

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