

# ASIDE

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## DIGITAL SOCIAL INCLUSION

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Erasmus+

## REPORT IV

**Adult Social Inclusion in a Digital Environment**  
**Exchange of Good Practices**  
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## □ Introduction

We live in an immensely computerized world; the boom in technology is beyond belief now. This new era includes increasingly complex challenges. With the internet revolutionizing all things in life, every step we take requires some kind of digital work, digital reading, or digital production.

People's life improves with digital life in many dimensions of their work and home lives. Without digital technologies an integral part of life, it is not possible to make products, to analyse something, and to communicate with someone. The digital world is so broad that it encompasses almost everything, people from all ages as well as from all societies and regions. Even people who are not actively in work life need to use digital technologies for communication, information and sharing purposes in their daily life quite often.

In the past, all societies were combating and minimizing illiteracy in their population. Now, we are all facing the cyber-illiteracy problem, which refers to the major difficulties with living in an increasingly computerized world. Catching up with the developments in technologies and using them effectively have been a challenge for people, and having digitally-literate individuals has been a challenge for states and governments.

Digital literacy is the ability to understand and use technology. This knowledge and understanding also means knowing the limitations of technology and understanding the dangers. Digital literacy is not merely about consuming media; it is a concept related to finding, using and creating information online in beneficial and useful ways. The baseline level of digital literacy is needed for all people. Digital inclusion is related to the connectivity to the digital world in which people are connected to a new information system that helps them in employment and daily life activities.

Although digital technologies dominate the world, there are many places in different parts of the world that do not have adequate access to the internet for the basic necessities of life. On the other hand, many people who do have access to the internet in the places they live are known to struggle with too slow connections for school, work, healthcare, and other activities. Besides, many people who have affordable devices and networks also lack the skills to take advantage of technology to improve their life. The digital divide is considered to be associated with location and demographics as well as some other factors such as age, economy, education level, etc.

However, the gap caused by the digital divide has to be closed because more than any other time, the conditions caused by the pandemic have made digital inclusion a real need for everyone. Now, digitally excluded people cannot have access to equal education opportunities, they lack career and employment opportunities, limit their communication or access to public services. The pandemic we are facing today has made the digital divide clearer in terms of many aspects, so the need for closing this gap and enhancing social inclusion through digital inclusion are of great importance.

Countries today are looking for ways to include their citizens digitally and provide the services they need through digital sources in a faster and easier way. However, such initiation requires digitally literate people. Their inclusion in the digital world like the general population thus seems to enhance social inclusion as well.

Accessing and using information and communication technologies is a topic that has gained even more importance with the conditions brought by the pandemic, and it impacts individuals and the community as a whole. Technology is the tool for a digitally inclusive community in terms of economic and workforce development. It also enhances education, healthcare, civic participation, and public safety.

A digitally inclusive community requires the support and participation of all sectors including community-based organizations, public services, business world, policy makers, etc. Digitally included people will eventually become socially included. Therefore, people in disadvantaged groups such as less educated people, people with lower income, seniors, and people with disabilities should be provided with education services to become digitally included individuals in society. Actions taken to achieve these may vary from country to country; this report provides a summary of practices in different countries.

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## 1. Digital Social Inclusion: The Turkish Case

With the first experimentation started at Ege University in 1987, Turkey has had the internet available for the public since 1993. While cable internet has been available since 1998, ADSL has been available since 2001. Like the whole world, the internet and other digital sources have gradually dominated the activities carried out in everyday life and made our lives easier in terms of many aspects.

Lockdown measures all over the world have made it necessary to access many key activities online, which has made it harder for people who have low incomes to get connected. A wide range of activities from education to employment and even access to state aid require the use of the internet, which is a basic need. Lack or limited access to the internet simply limits the things people do, Turkey is no different today. There is no doubt that both the internet infrastructure and the number of firms operating in the internet sector have been developing in Turkey over the years.

TUIK, Turkish Statistical Institute, reports some statistics regarding the internet use in Turkey, which could provide a holistic picture of the issue. Some of the statistics reported by TUIK and other national and international reports are as follows:

In 2009, only 30% of households in Turkey had internet access at home. Today, 91% of households have access to the internet, which was 88.3 % in the previous year.

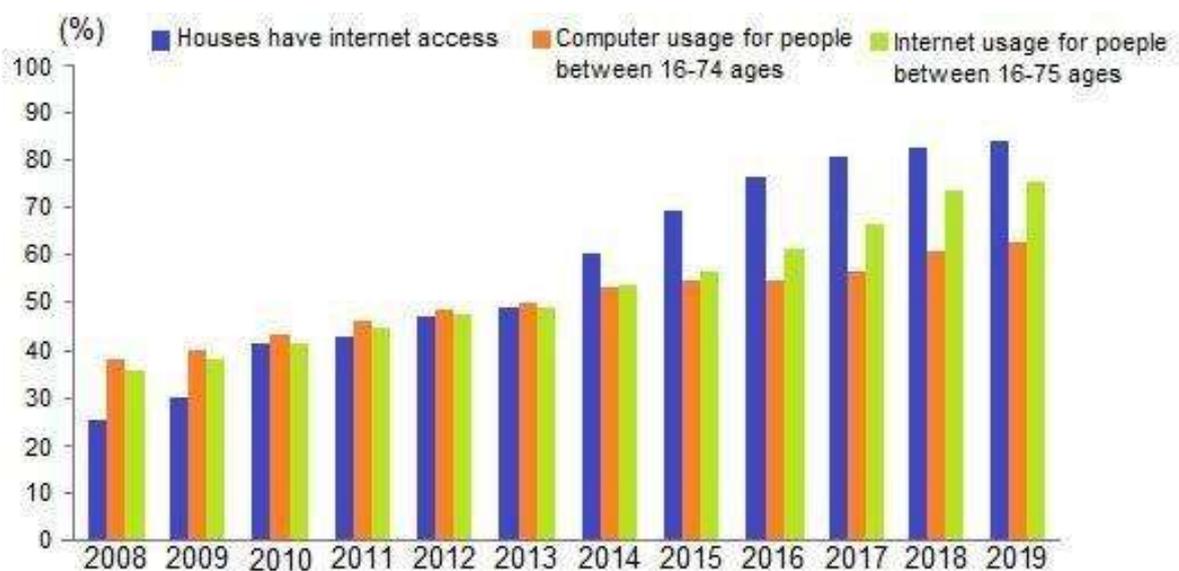


Figure 1. Statistics on Computer and Internet use from 2008 to 2019 (Kaya & Aydın, 2019)

According to a report published in February 2021 (<https://datareportal.com/digital-in-turkey>), there are around 65.80 million internet users in Turkey. The number of internet users increased by 3.7 million between 2020 and 2021.

The number of social media users is 60 million, equivalent to 70.8% of the total population, by January 2021.

According to the Turkish Statistical Institute, between April 2019 and March 2020, 51.5% of internet users went online to access government organizations or services.

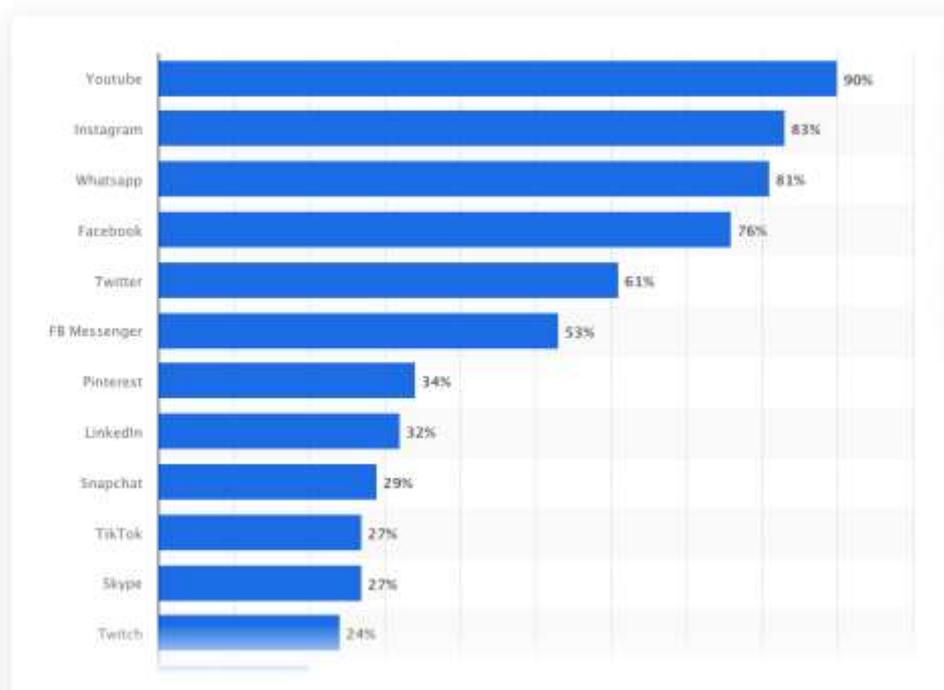
According to the ICT Usage Survey on Household Individuals, in 2020, internet use of people aged between 16 and 74 was 79.0% .

Internet use was 84.7% among males and 73.3% among females.

The proportion of ordering or purchasing products online was 36.5% .

Proportion of households with mobile phones was 96.9% .

Social networks took first place among the activities on the internet and the frequency of regular internet use increased within the past one year.



**Figure 2. Leading Social Networks in Turkey (Source: Statista, 2021)**

Turkey is a developing country and has a young population and growing economy. Several initiations performed over the years have aimed to maintain digital inclusion in various fields. Turkey has long been demonstrating intense effort to promote technology in education. Early stages of this initiation included providing every school with one computer, in later stages, the purpose was to provide one computer in each classroom. Between the years 1998 and 2004, within the scope of FATIH (Movement of Enhancing Opportunities and Improving Technology) by the Ministry of National Education, the following targets were set: accessibility, productivity, equality, measurability and quality. The project also aimed to provide VPN-Broadband Internet Access, Infrastructure, High Speed Access for every school and Interactive Board, Wired/Wireless Internet Access for every classroom.

Digital inclusion could be utilized as an opportunity to reduce inequality. Digitally available sources could be reached to many under-represented populations in their global context. Turkey has people from diverse socio-economic, linguistic and educational backgrounds, so such inclusion should be considered to enable social inclusion.

In Turkey, the 2016-2019 National eGovernment Strategy and Action Plan aimed to provide the acceleration needed to guide Turkey's digital transformation. The plan aimed to achieve social, economic and environmental development. The implementation of the eGovernment Strategy and Action Plan aims to create an elevating effect for the welfare of the country. In line with this objective, the vision of the 2016-2019 National eGovernment Strategy and Action Plan was defined as 'Improving the quality of life for society with ETKİN (EFFICIENT) eGovernment'. The acronym indicates that eGovernment will be more Integrated (Entegre), Technological (Teknolojik), Participatory (Katılımcı), Innovative (İnovatif) and Qualified (Nitelikli) with its focus on being an ETKİN (EFFICIENT) eGovernment Ecosystem, with a more competent and agile position as the enabler of transition to an information society and sustainable development (<https://joinup.ec.europa.eu/sites/default/files/inline>).

Like many other countries in the world, Turkey offers digital services for their citizens. Digital Government Infrastructure Portals eGovernment Gateway (e-Devlet Kapısı) e-Devlet Kapısı, Turkey's eGovernment gateway (portal) has been used since December 2008. The portal enables citizens and enterprises to access eGovernment services. The gateway also enables the public sector agencies to interact with each other and exchange information.

Turksat is Turkey's main provider of satellite services and one of the biggest providers of IT infrastructure services. As of June 2019, eGovernment Gateway had 4808 services, 601 integrated organizations, and more than 42 million users.

In Turkey, access to eGovernment services is possible through Both iOS and Android applications, the site was declared one of the most popular apps of the year. The number of mobile apps provided in the platform became 2245 in June 2019. The amount of official papers exchanged among public agencies was then reduced. A secure, reliable and single authentication service center can be used for many public services.

Some services provided include:

- Social security documents
- Forensic clearance
- Address documents
- Tax debts
- Traffic bills
- Mobile telephone number checks
- Deeds
- Student documents
- Family tree

Educational Information Network (EBA) is another important service provided by the Ministry of National Education. EBA is an online social education platform offering digital educational materials such as videos, educational software and educational games free of charge. The educational materials provided by EBA can be accessed at any time and place. The platform aims to support the use of effective digital educational materials through information technologies and to ensure the integration of technology into education. EBA evolves continually according to digital educational content tailored to all class levels by following innovations in education and technology.

Various national and international projects and opportunities aim to teach digital skills to disadvantaged groups. These kinds of learning platforms teach low-skilled adults, women, or other disadvantaged groups some digital skills to improve their employability as well as help social inclusion through digital literacy. A project, for example, includes Syrian and Turkish women (<https://epale.ec.europa.eu/en/content/trainings-improve-digital-literacy-turkish-and-syrian-women>) in a project aiming to boost their digital literacy and skills.

E-learning technologies and electronic literacy are the essential parts of everyday life, which also includes social life. Social inclusion cannot fully be achieved without digital inclusion in a life that is experienced through digital sources every day. Many people in Turkey access the internet through their mobile devices only, which means that the content of digital sources should be suitable for access and use on mobile devices. Every day, more and more services in Turkey are being made available through mobile applications as well.

Although valuable contributions were achieved regarding internet access and use, there are still some obstacles to overcome since there are many individuals who are not able to benefit from technologies. Most government services are becoming available online. However, effective use of these services requires new educational competences, technological access and skills in line with the new age. Participating in an increasingly online world could be problematic by a number of factors such as poverty, illiteracy, and other disadvantages associated with them (Polat, 2012). Polat (2012) reports that digital exclusion, which arises from the digital divide, increases social and economic inequalities.

The literature divides digital divide into two: the first-level digital divide and the second-level digital divide. While the first-level divide refers to access inequality, the second-level divide is associated with four barriers including motivation to use digital technologies, technical access, digital skills acquisition, and effective use of the internet. Hence, equal internet access does not guarantee equal use of the internet (Brandtzæg et al. 2011). A study conducted in the Northeast Anatolia region in Turkey reported that the participants had low digital skills; the study did not include non-users. The participants did not have internet access problems, but the internet use in this region (61.3%) is lower than the average internet use in Turkey (75.3%).

Since 2004, TURKSTAT has been conducting 'Information and Communication Technology (ICT) use. Although there is an increase in terms of access and internet use, TURKSTAT data indicates that there is still an important digital divide problem in Turkey. The study conducted by Ozsoy et al. (2020) provided evidence for internet use among people in Turkey living in Northeast Anatolia region and reported that the participants had low strategic skills, indicating that the users studied are not able to translate their internet use into real-world tangible benefits.

A study conducted in the Northeast Anatolia region in Turkey examined the attitudes, online engagement, online activities, and motivation among people with different digital skill levels. The region where the study was conducted had many restrictions in issues such as internet access, internet use, and digital skills. In-depth interview results indicated that those who possessed higher levels of proficiency benefitted from the internet. Results also reported a strong pattern of gender inequality, indicating women's digital exclusion.

Although many private and public education institutions started teaching online in the pandemic process, the Turkish education system still lacks the physical infrastructure, training programs, budget finances and equality for student opportunities (Ercetin et al. 2019). These

differences are most significantly demonstrated across the different regions of the country. For instance, western parts of the country benefit from the greater educational advantages while poorer eastern parts display inequality in terms of educational opportunities (Inan & Demir 2018) as well as access and use of the internet. These differences between the regions could be better understood by the literacy rates reported in 2018 by the Turkish Statistical Institute report, the illiteracy rate was indicated as 2% in the western part, while it was 12% in the eastern part. Differences in the general public in terms of literacy are actually indicators of some other differences as well. Some examples might include access to education and health services, lower levels of development, more difficulties in accessing knowledge and various facilities, etc.

These differences putting individuals in a more disadvantaged position among their peers also cause social exclusion for many students in the eastern regions. Whether or to what extent more equitable opportunities can be achieved through digital inclusion is a topic worth investigating. Social inclusion is defined as “the process of improving the terms on which individuals and groups take part in society. For example, improving the ability, opportunity, and dignity of those disadvantaged on the basis of their identity” (World Bank 2019). Living in rural areas with lower education levels and access to services are considered disadvantaged groups and they are potentially excluded.

## 2. Digital Social Inclusion: The Czech Republic Case

Inclusive and digital education has been a major point of discussion in recent years education both among teachers and among the general public. On a clear and uniform level however, the experts do not agree either. In any case, it represents inclusion in education as a certain indicator of a country's maturity, it is an important turn in society's thinking and in its attitude towards otherness. The majority of Czech society still considers inclusion in education to be a new phenomenon, therefore, she is insecure towards her. In everyday life, however, we encounter differences all the time, namely it comes naturally to us. Both the Czechia and France have committed themselves to enabling and securing their signatures access to education in mainstream schools for all children without distinction as early as 1994, which would in today's democratic world, perhaps it should have been taken for granted. In both states however, educators themselves are often still full of doubts about inclusion. Especially in the attitude to their own competencies or in the question of support. Here, then a lot it depends on the school management. This is a complex problem and a long-term process. If it is to be inclusive, education has been successfully implemented, negative views and attitudes need to be mitigated among teachers and the public. Schools must find the will to transform existing methods and approaches and be open to new possibilities and information.

The origin and development of special schools in the Czech Republic goes relatively far and has a rich history. In the 19th century, with his reforms, the physician and pedagogue K.S. Amerling, who was inspired and seen in the Enlightenment thoughts of J.A. Comenius (Kohout-Diaz 2016). In his pedagogical writings, he focused mainly on students with a mental disability and tried to make education accessible to all (Lechta 2016). It was Amerling who founded and ran the first institute for the weak in 1872, to whom he provided both care and education (Kohout-Diaz 2016). At the beginning of the twentieth century, Czech experts first became interested in the issue of specific learning disabilities. As a rule, these are living, irritable pupils, inattentive, with poor memory, and therefore often with insufficient academic results. At that time, however, the causes of such behavior were attributed solely to injury to the brain. As early as 1904, however, psychiatrist Antonín Heveroch noticed an interesting phenomenon, when you are a completely ordinary student with an average or even above-average intellect and extraordinary Memory, however, are unable to master writing and reading skills. He challenged other educators to pay more attention to their students so that they do not miss such situations (Švamberk Šauerová, Špačková, Nechlebová 2012).

From the frequent discussion taking place on Digital Education and the topic of digitization, it is clear that the state is aware of its importance. However, the question arises as to what specific steps it is taking to develop Digital Literacy in adults. As Beneš (2014, p. 36) states, in adult education the involvement of non-governmental organizations is growing and the social policy of the state in this area is receding into the background. This assumption can also be based on the approach to Digital Education among development in adults, which is not comprehensively grasped by the state and depends mainly on the individuals themselves, whether to use commercial courses or other educational paths (eg self-study) and Digital Literacy they will develop.

An integral part of an individual's own activity is the key ability to recognize own shortcomings in the field of Digital Literacy and be able to determine for himself which specific aspects of Digital Literacy the individual needs to improve or update.

Opportunity to learn basic PC use or expand your skills with the use of PC, however, offers, for example, the Labor Office in the form of retraining, because the state recognizes that a higher level of Digital Literacy and knowledge of digital technologies is significantly increasing its application in the labor market and the competitiveness of jobseekers (Median, 2017, p. 29). Here again the question of finances arises, because if the applicant does not meet the specific conditions of the Office work, then they must finance the course independently. However, in order for education to be accessible to all, it is also necessary to offer it free of charge training courses in this area. Mention may be made, for example, of PC clubs which operate within city libraries and offers free basic PC education. Free education also complements the non-profit sector, which is at risk or socially vulnerable; it also offers these courses free of charge to excluded persons. In addition, in the city libraries often a publicly accessible computer with an internet connection for free use, so use it for example, there may be people who do not have a computer at home. The Methodological Manual of the National Library focuses on a specific group of seniors of Czech Republic, which describes the area of educational activation programs and mentions that from the section Digital Literacy libraries organize training courses most often, not only the basics of working on a PC, but also such as digital camera and photo editing courses or tools Google (National Library of the Czech Republic, 2016, pp. 38-49).

### 3. Digital Social Inclusion: The Spanish Case

Over the last two decades, successive Spanish governments have adopted programmes for digital progress, aligned with European digital agendas, which have served as a framework to promote a process of infrastructure deployment and the development of a business and technological ecosystem in a key area for economic productivity, territorial structuring, and social progress. Thus, the Info XXI Plan, the España.es Programme, the Avanza Plan and, lastly, the Digital Agenda for Spain of February 2013 have enabled a strategic approach that has guided a significant public and private investment effort in this area.

Most of these digital strategies and agendas have been articulated around four main lines of action: (1) deployment of networks and services for digital connectivity; (2) digitisation of the economy; (3) improvement of eGovernment; and (4) training in digital skills. Although progress has been significant in all axes, the public and private investment emphasis has been clearly focused on the extension of physical telecommunications networks.

As a result of these programmes, Spain is in a very favourable position to tackle the next phase of the country's Digital Transformation process, with one of the best digital infrastructure networks in the world, leading companies in key sectors (health, agri-food, mobility, tourism, finance), modern cities and a diverse, dynamic, and agile society able to adapt to change. Our country is also relatively well placed in the digitisation of the administration and has formidable potential in the application of new technologies to information management and the implementation of public policies.

The exceptional situation resulting from the COVID-19 pandemic has accelerated the digitisation process, highlighting the strengths as well as the shortcomings from an economic, social, and territorial point of view. Indeed, during the months of restricted mobility, the capacity and resilience of telecommunications networks to cover an extreme situation of super-connectivity has become evident, with increases compared to 2019 of up to 50% in fixed voice, 30% in mobile voice, 20% in fixed network data, and 50% in mobile data traffic. In addition, digital audio-visual services have consolidated their leading role as a generalised consumer good in leisure and entertainment, as they are an accessible alternative to maintain those activities affected by restrictions on physical mobility. Teleworking has also increased significantly, and the digitisation of education has been boosted, with a radical change in methods and content.

These processes have brought to the fore the need to urgently address the pending challenges to reinforce the social, territorial and ecological structuring of our country, guaranteeing accessibility for society as a whole to the opportunities provided by the new digital economy. This requires a particularly significant investment effort in the coming years to strengthen digital connectivity throughout the national territory, helping to reduce the gap between urban and rural areas. But also to ensure the availability of adequate tools and equipment for the whole population, to boost the digital training of workers, entrepreneurs, students, teachers and the entire educational community for the future, and to support the digitisation of companies, reorienting the production model towards a more resilient and sustainable economy, increasing productivity, but also improving well-being and inclusion.

The European Commission's Next Generation EU proposal includes a new Reconstruction and Resilience Fund, which also considers as one of its priorities to finance investments related to the Digital Transformation with a view to boosting a strong economic recovery from the second half of 2020. These EU programmes aim to help reduce Europe's investment

gap with China and the United States, which the European Commission estimates at €125 billion.

All of this explains the urgency of articulating Digital Spain 2025: an updated Agenda that promotes Spain's Digital Transformation as one of the fundamental levers for relaunching economic growth, reducing inequality, increasing productivity, and making the most of all the opportunities offered by these new technologies. And that it achieves this with respect for constitutional and European values, and the protection of individual and collective rights.

Digital Spain 2025 brings together a set of measures, reforms, and investments, articulated in ten strategic axes, aligned with the digital policies set by the European Commission for the new period. The Agenda's actions are aimed at promoting more sustainable and inclusive growth, driven by the synergies of the digital and ecological transitions, reaching society as a whole and reconciling the new opportunities offered by the digital world with respect for constitutional values and the protection of individual and collective rights:

1. Guarantee adequate digital connectivity for 100% of the population, promoting the disappearance of the digital divide between rural and urban areas (target 2025: 100% of the population with 100 Mbps coverage).
2. Continue to lead the deployment of 5G technology in Europe, encouraging its contribution to increased economic productivity, social progress, and territorial structuring (2025 target: 100% of the radio spectrum prepared for 5G).
3. Strengthen the digital skills of workers and citizens (target 2025: 80% of people with basic digital skills, of which 50% will be women).
4. Strengthen Spain's cybersecurity capacity, consolidating its position as one of Europe's business capacity poles (target 2025: 20,000 new specialists in cybersecurity, AI, and Data).
5. Boost the digitisation of Public Administrations (target 2025: 50% of public services available on mobile apps).
6. Accelerate the digitalisation of companies, with special attention to micro-SMEs and start-ups (target 2025: 25% contribution of e-commerce to SME turnover).
7. Accelerate the digitisation of the production model through sectoral transformation projects that generate structural effects (2025 target: 10% reduction in CO2 emissions because of digitisation).
8. Improve Spain's attractiveness as a European platform for business, work and investment in the audio-visual sector (target 2025: 30% increase in audio-visual production in Spain).
9. Favour the transition towards a data economy, guaranteeing security and privacy and taking advantage of the opportunities offered by Artificial Intelligence (target 2025: 25% of companies using AI and Big Data).
10. Guarantee citizens' rights in the new digital environment (target 2025: a national charter on digital rights).

In addition, Digital Spain 2025 proposes a cross-cutting objective strongly aligned with the Sustainable Development Goals (SDGs) and the 2030 Agenda: to contribute considerably to closing the different digital divides that have widened in recent years for socio-economic, gender, generational, territorial, or environmental reasons. Gaps in access to and use of digital technologies, which have become particularly visible during the first months of the Covid-19 pandemic, and which have led to urgent action by the Spanish government, for example, by making half a million digital devices with connectivity available to students affected by the digital divide, through the Educa en Digital programme.

For all these reasons, Digital Spain 2025 is a State policy with the characteristics of a structural reform for the future. To drive it forward, it is necessary to mobilise a large volume of public and private investment in the country, jointly estimated at around 140,000 million euros over the next 5 years. Given the average investment maturity period and the time required to achieve results, it is necessary to concentrate investment in the first two years, to boost the reactivation of the European economy after the fall in production resulting from the pandemic and to give a decisive boost to this strategy, which must be based on a good coordination of initiatives at the different levels of government (European, national, regional and local) and public-private partnerships.

To achieve this, Digital Spain 2025 envisages the implementation during 2020-2022 of a set of structural reforms, consisting of approximately 50 measures, which would mobilise a significant volume of public and private investment of around 70 billion euros in the period 2020-2022. The scope of the actions financed by public budgets would be around EUR 20 billion, of which approximately EUR 15 billion would correspond to the different programmes and new financing instruments of the European Union. This would be in addition to the expected private sector investment of around EUR 50,0006 million in a moderate deployment scenario.

Below are those measures that refer to inclusion through digitisation.

#### **A. DIGITAL CONNECTIVITY PLAN**

Broadband communications infrastructures are a cornerstone of the digitalisation strategy. In addition to having been an ally in the fight against the pandemic, the improvement of digital infrastructures is a key driver for the recovery of economic activity and social inclusion.

This Plan develops a set of measures that will help alleviate, from an inclusive point of view, the effects of the pandemic: (1) guaranteeing connectivity to maintain social and economic activity at a distance; and (2) boosting economic activity through the development of digital infrastructures.

The main line of action of the Connectivity Plan affecting social inclusion will be:

##### **Encouraging the use of digital networks and services: Connectivity Vouchers**

The connectivity of the Gigabit Society requires going beyond the availability of broadband infrastructure for the entire population. broadband infrastructure for the entire population. Connectivity between people, objects and businesses only exists if the infrastructures are used. It is necessary to encourage the use of digital services, starting with productive uses, seeking support in the strengths of the Spanish digital sector of electronic communications services, especially in terms of secure digital identity, so that anyone in any territory has access to these services even - or especially - in exceptional circumstances such as the one caused by the COVID-19 crisis.

To this end: (1) a line will be opened to support the connectivity of sectoral digitisation initiatives, which will boost the digitisation in particular of SMEs and self-employed, both in urban and rural areas, with a special focus on those sectors most affected by the COVID-19 crisis; (2) to enable distance education, digital vouchers will be launched to facilitate connectivity for school children, in line with the Educa en Digital programme (3) the possibility of developing social connectivity vouchers for the most vulnerable groups will be explored, linked to other programmes aimed at bridging social gaps and fostering integration.

## **B. UPDATING PUBLIC SECTOR TECHNOLOGICAL INFRASTRUCTURES**

The infrastructures of the General State Administration, which provide private cloud services to the Administration itself, will be reinforced, enabling the hosting of infrastructures and equipment from other management centres. This will eliminate obsolete data processing centres, reducing energy consumption and the carbon footprint. These infrastructures will in turn be complemented by other services provided by public cloud providers to be used for specific needs.

Among the areas with the greatest potential for Digital Transformation within the General State Administration, there are several opportunities for social inclusion:

Digitalisation of Inclusion policies. Social Security and Migration: the analysis and evaluation of benefits, policies, and programmes with an impact on inclusion objectives will be promoted through the digitisation of procedures, innovation, and optimisation of processes, as well as the integration and advanced exploitation of large-scale information from external sources. These results will be the starting point for the review of indicators, the definition of targets and the design of strategies, policies, and programmes, through evidence-based decision making, with the aim of reducing poverty and inequality, favouring legal migration and promoting inclusive growth.

## **C. DIGITAL FUTURE SOCIETY**

"Digital Future Society (DFS), an initiative promoted by the Ministry of Economic Affairs and Digital Transformation of the Government of Spain and Mobile World Capital Barcelona, builds a fairer and more inclusive future in the digital era to improve the impact of technology on society.

To this end, DFS connects institutions, corporations, civic organisations, and academia to generate debate, share knowledge, create solutions to the challenges presented by digital advancement and bring them closer to citizens. Digital Future Society works in four key areas: public innovation; trust and digital security; equitable growth; and inclusion and citizen empowerment.

The actions encompassed by the project consist, firstly, of the think tank, as a transnational initiative aimed at commissioning and interconnecting research, knowledge exchange and support to address the complex ethical, legal and inclusion challenges arising from the design, use and governance of digital technologies.

Secondly, the Civil Lab, which aims to identify existing Digital Transformation solutions or help create them, in response to the societal challenges described by the think tank.

Thirdly, citizen empowerment and territorial impact, which seeks contact with society and social agents to publicise the results of the programme and debate the challenges and solutions within the territory. And fourthly, the holding of international events such as the Digital Future Society Summit.

## 4. Digital Social Inclusion: The Polish Case

A decade ago in Poland, people aged 60+ using the global network accounted for a negligible percentage of all Polish internet users. According to the Megapanel PBI / Gemius study from 2005, there were only 3.4% of internet users aged 55+. A large part of them had contact with the internet for the first time due to the emigration of children and grandchildren - the communicator installed on the old computer was the cheapest form of contact with the family. Family members were also teachers of new skills. In this way, the first steps on the internet were taken by some of the users of the portal Senior.pl, which we have run since 2006. Others learned to use the computer and the internet during courses at universities of the third age, libraries or community centers.

Later, the first nationwide initiatives to introduce older people to the digital world appeared. Their authors were computer publishing houses, telecommunications operators, but also non-governmental organizations. A good example is the "UPC e-Senior Academy" program, started in 2007 and continued (although in a changed form), prepared by UPC Polska in cooperation with the Academy for the Development of Philanthropy in Poland. As part of the program, cyclical free courses were held in several cities in Poland, and one of the first textbooks for learning to use the computer and the internet dedicated to the elderly was created. Over time, the number of such initiatives increased, and today Polish seniors have many courses and trainings at their disposal. Every year, textbooks and guides are also created and updated to help mature internet users navigate the global network<sup>1</sup>.

The INTERNAUCI 2014 Report, prepared by the Public Opinion Research Center Foundation, shows that in 2014 in Poland 19% of people aged 65 and over used the internet at least once a week. In the 55-64 age group it is already 42%<sup>2</sup>. On the other hand, data from Megapanel PBI / Gemius from 2016 indicate that every fifth person over 55 uses the network<sup>3</sup>.

At the end of 2019, the population of Poland amounted to 38.4 million, including over 9.7 million people aged 60 and more (over 25%). Compared to 2018, the number of senior citizens increased by 195 thousand people, i.e. by 2.1%. Despite the projected decline in the population by 4.5 million by 2050, the population of people aged 60 and more will increase in the final stage of the forecast horizon to 13.7 million and will account for over 40% of the total population.

The widespread use of modern technologies (computers, smartphones, the internet, mobile banking, modern office equipment and household appliances, etc.) may constitute a barrier to the active participation of older people in social and public life. According to a survey by the Central Statistical Office<sup>4</sup> 60% of people aged 65 and over have never used the internet. Additionally, as many as 82% of those who did not use the network of seniors did not feel the need to use the network, and 71% declared the lack of skills as an obstacle. Only 9% did not use the internet for economic reasons. On the other hand, according to Eurostat surveys, only every fourth elderly person (26%) uses the internet at least once a week, while in the

<sup>1</sup> Gacka, J. (2017). *Polscy seniorzy w sieci: wirtualna złota jesień? korzystanie przez osoby dojrzałe z internetu i nowych technologii*. Konteksty społeczne, Tom 5, Nr 1 (9), 84-91.

<sup>2</sup> Internauci 2014. (2014). Pobrane z: [http://www.cbos.pl/SPISKOM.POL/2014/K\\_082\\_14.PDF](http://www.cbos.pl/SPISKOM.POL/2014/K_082_14.PDF)

<sup>3</sup> Megapanel PBI/Gemius. (2005–2015). Pobrane z: <http://www.panel.pbi.org.pl/megapanel.php>.

<sup>4</sup> *Wykorzystanie technologii informacyjno-komunikacyjnych w gospodarstwach domowych w 2018 r.*, GUS, Warszawa 2018.

European Union almost half (48%). The digital exclusion of older people is even more visible among people aged 65-74 as only 10% of people in this age group surf on social networks<sup>5</sup>.

The data for 2019 indicate that the computer was used (in the last 3 months preceding the survey) by 1,360.3 thousand people aged 65-74, which accounted for 34.1% of the total number of people in this age group (an increase by 2.4 percentage points compared to 2018). The percentage of computer users was higher among men (38.3%) than among women (30.8%). During the last three months, 1,477.2 thousand people used the internet. people aged 65-74, i.e. 37.0% of the total number of people in this age group (40.7% men and 34.2% women).

Taking into account the dynamic development of ICT and its widespread use in everyday life, especially by younger generations, it is necessary to take measures to counteract the digital exclusion of older people. The cited data clearly show the important role of training and courses that strengthen the competences of older people in the use of new technologies. Organized workshops and classes help the elderly to consolidate their acquired knowledge, to get used to technological innovations, but above all to improve everyday activities over time, such as using social media, shopping via the internet, paying bills or settling official matters. This, in turn, means that the elderly remain independent and independent for longer, and have no fear of the constantly changing reality<sup>6</sup>.

### ***Digital Social Exclusion***

Digital social exclusion can be understood not only as the lack of access to technological achievements (mainly computers, tablets, smartphones and the internet), but also as the inability or lack of motivation to use them, along with all its consequences concerning social life, participation in culture, labour market etc. In order to integrate adults to the new technological world, associations and institutions dealing with non-formal education must prepare courses and workshops to make fully use the computer and the internet, and more important, the user needs:

- motivation to use modern technology
- physical access to devices connected to internet
- appropriate skills related to the use of a computer and mobile devices
- ability to search for information
- issues related to the safety of use
- take care of their own privacy while browsing the internet

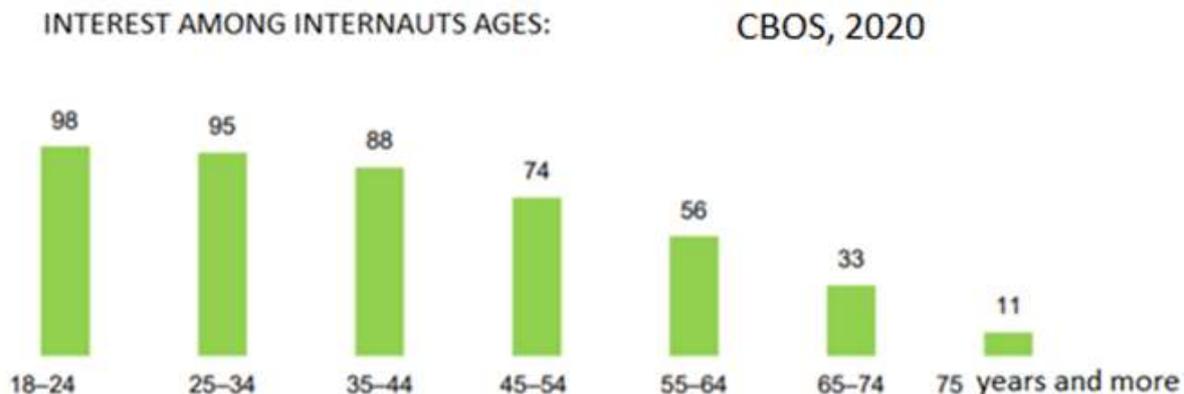
The use of devices with an internet connection depends primarily on age, and to a lesser extent also on the level of education, which is important mainly in the case of older respondents. Internet use is almost universal among people under 35 and very common among those aged 35 to 54, the vast majority of whom are also online. Internet users account

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<sup>5</sup> *Aktywność osób starszych. Opracowanie tematyczne*, Kancelaria Senatu, Warszawa 2019, s. 19-22.

<sup>6</sup> *Program Wieloletni na rzecz Osób Starszych AKTYWNI + na lata 2021-2025*, Ministerstwo Rodziny, Pracy i Polityki Społecznej, Warszawa 2020.

for more than half of the respondents aged 55-64. In turn, two-thirds of respondents aged 65 to 74 and nine in ten of the oldest respondents (75+) remain offline<sup>7</sup>.



*Public Opinion Research Center [CBOS], Using the Internet<sup>8</sup>*

Some good examples of digital social inclusion in Poland can be found in the following projects implemented in the last years:

#### ***"eSenior, or Age-Friendly Warsaw 2.0"***<sup>9</sup>

The essence of the project was to counteract digital exclusion of seniors and social integration of people at risk of exclusion through the activities of Digital Integration Animators.

During the project, a Senior Support Point was created, where meetings with seniors were held to improve their computer and Internet skills.

- operating web browsers and searching for information, using social networks,
- making purchases via the Internet,
- handling e-mail.
- Trainings for Digital Integration Animators,
- thematic workshops for the elderly were organized, among others:
  - "Communicators",
  - Online Shopping,
  - "Games and Activities",
  - "Culture and Art",
  - "Internet Science".

The Warsaw Senior Week was organized. The activities of Digital Integration Animators contribute to building a support network for people aged 60+, not only during the project implementation, but also after its completion. That is why it is important for local government units to become an Animator in the eSenior project by any person who meets certain criteria, declares a willingness to conduct meetings, has sufficient competences in the field of electronic equipment and the Internet, but also shows interest in working with the elderly and

<sup>7</sup> Ibidem, p.6.

<sup>8</sup> CBOS, *Using the Internet*. [https://www.cbos.pl/SPISKOM.POL/2020/K\\_085\\_20.PDF](https://www.cbos.pl/SPISKOM.POL/2020/K_085_20.PDF) [downloaded 9.04.2021]

<sup>9</sup> <http://www.um.warszawa.pl/aktualnosci/esenior-czyli-warszawa-przyjazna-wiekowi-20>

has the gift of inspiring for further activities. The participants of the project were older residents of Warsaw and younger - Animators of Digital Integration.

The project was implemented in cooperation with many Warsaw non-governmental organizations and cultural institutions.

### **"Senior MÓVIN" blog, Krakow<sup>10</sup>**

Nowadays, the internet is ubiquitous, and using it is something natural. Therefore, with the aim of preventing social exclusion, including digital exclusion of inhabitants, the project enables them to learn how to use the benefits of modern technologies. One of the forms of this type of activation is blogging by seniors.

It is a blog that gives you the opportunity to share your thoughts and feelings with others. The main idea of the blog is to encourage as many residents of the Nursing Home as possible to share their passions, interests, ideas, talents, etc. private coups ".

Seniors living in nursing homes are people with a lot of experiences (good and bad). Each of them has a potential worth discovering and showing. Often, older people lack self-confidence and abilities.

Creating a blog is a great tool to show seniors that there are people (apart from staff) who are interested in what they have to say and show. Small things like the ability to choose clothes or reading books can become a reason for pride and self-esteem.

### **„Akademia e-Seniora”<sup>11</sup>**

The online education program for the elderly, initiated by UPC Polska, operates under the prosocial program "In one community". It aims to counteract the social exclusion of older people and include them in the information society. This initiative includes organizing courses in the basics of computer skills and work on the internet. A rich and very useful website was also created ([www.upclive.pl/Akademia\\_e\\_Seniora/](http://www.upclive.pl/Akademia_e_Seniora/)), containing useful information for participants, virtual lessons, a glossary of terms and numerous links to interesting articles.

For the purposes of the courses, an original textbook was developed exclusively for seniors, entitled UPC e-Senior Academy - a textbook, consisting of two parts. The first is closely related to the computer and internet skills course, the second is general in nature and contains articles describing and explaining the modern digital and virtual world.<sup>12</sup>

<sup>10</sup> <https://www.rpo.gov.pl/pl/content/blog-%E2%80%9Esenior-m%C3%B3vin%E2%80%9D-krak%C3%B3w>

<sup>11</sup> [www.upclive.pl/Akademia\\_e\\_Seniora/](http://www.upclive.pl/Akademia_e_Seniora/)

<sup>12</sup> Morbitzer J. Seniorzy w społeczeństwie informacyjnym, [https://depot.ceon.pl/bitstream/handle/123456789/8675/Seniorzy\\_w\\_swiecie\\_nowych\\_tehnologii\\_Im.pdf?sequence=1&isAllowed=y](https://depot.ceon.pl/bitstream/handle/123456789/8675/Seniorzy_w_swiecie_nowych_tehnologii_Im.pdf?sequence=1&isAllowed=y)

### „Dojrzałość w sieci”<sup>13</sup>

The aim of this project is to unite companies, non-governmental organizations, offices and institutions to encourage older people to actively use the internet and to counteract e-exclusion.

The members of the organization are: the Foundation for the Jagiellonian University, the Information Society Development Foundation, F-Secure, IBM, Microsoft, Onet.pl, the Polish Confederation of Private Employers Lewiatan and the Polish Scouting Association.

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<sup>13</sup> [www.upclive.pl/Akademia\\_e\\_Seniora/](http://www.upclive.pl/Akademia_e_Seniora/)

## 5. Conclusion

The digitalized world has been dominating our lives more and more every day, and the pandemic has made it faster than expected. A wide range of activities including education, shopping, navigation, health, citizenship, banking, entertainment, music, movies, photography, social media are performed in a large digital room that involves the world in it. How many different types of things we do through digital sources demonstrate how dominant the technology is in our lives.

The focus of the future world is digital. While they dominated the world, digital technologies have advanced more rapidly than any innovation in the history of humanity. Technologies have the potential to be a great equalizer by enhancing connectivity, financial inclusion, access to education, health and public services. Services accessed without time and place (and even device) constraints play an important role for all populations worldwide. Digitally included people become socially included. Not only companies but also governments have been providing users with digital opportunities, which has some certain benefits in terms of the human power used, papers consumed, and the speed of the services provided.

However, being socially and digitally included requires digitally literate individuals, which requires acquiring a number of skills and competences. Although gaining these skills is easy for younger age groups and digital natives, it can be more challenging than expected for older age groups and disadvantaged groups of people. All countries in some way or other experience the digital divide problem. Some factors such as advanced age, poverty, lack of motivation, low education, etc. cause the digital divide and hence exclude certain groups. Those people who have never been digitally included or those who have inadequate digital inclusion have difficulties in being part of the digitalized world, which in turn makes them socially excluded.

Therefore, education centres and governments should aim to help disadvantaged groups to become digitally included through various projects or other education opportunities. Countries should learn from each other's best practices and adapt them to their unique conditions. Digitally excluded populations should be provided with more opportunities, motivations and new benefits for being digitally included.

To complete these conclusions, the results obtained by the researchers who are experts in digital technology and the new dimension of the relationship between education providers and learners are shown. First, the results obtained by María Carmen Hidalgo Rodríguez (University of Granada) concludes that:

*Social inclusion is a need and a right that must be manifested in all factors of life. Digital inclusion is one more factor that must be considered and that undoubtedly has a lot of relevance today.*

On the other hand, Enrique Lemus (Universidad Latina de México) concludes that:

*Digital inclusion mean acces to information, knowledge, services, oportunities, and I'm sure there is a direct relationship between digital and social inclusion, but the first is not enough to guarantee the second.*

In conclusion, the pandemic the World is facing today is accelerating the pace of digital transformation. A digitally inclusive community requires the support and participation of all sectors. Some vulnerable groups are left behind in this fast transformation process. When this gap is not closed, they will be socially excluded. Governments and all stakeholders should develop a framework to close the digital divide.

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