

ANALYTICAL PAPER ON DIGITAL SKILLS



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01.

INTRODUCTION

The COVID-19 pandemic has highlighted the importance of facing the challenges related to digital transformation. It has contributed to accelerate digitalization processes and broadened previously identified gaps in new skills requirements, thus making the digital divide even more evident in the absence of concrete actions. At the same time, this acceleration can be seen as beneficial. Indeed, the pandemic has changed the attitude of people in upskilling and reskilling needs. Implementing successful digital strategies is not only a response to rapidly adapt to the new changed context, but is also a valuable and significant opportunity to improve and innovate the work environment and individuals' lives. The benefits of digital transformation are tangible. It enables:

- to enlarge networks and synergies between organizations;
- to improve the performance of workers who can be more efficient and satisfied, keen to collaborate and communicate using new digital tools, software and methodologies;
- to increase the quality of the services making them more accessible and usable for end users;
- to engage customers and building relationships through different channels;
- to automate processes and make them more sustainable.

In order to achieve these goals, targeted actions are necessary to help people in developing and improving their digital skills through specific education and training programmes shaped to the identified needs and providing the proper technological equipment.

The organizations active in the field of rehabilitation and support of people with disabilities were strongly hit by the pandemic. The impact of the pandemic has led to questioning the way of working, collaborating and providing services among many EPR members. In some cases, in order to preserve their activities and ensure their continuity during the crisis, many organizations had to move most of their activities online.

Building and improving capacities and skills is a key element to successfully manage transitions moved by technological change, climate change, globalisation, migration and ageing and to tackle rising inequalities. Skills are fundamental not only to foster urgently needed innovations, but also to enable the adoption and diffusion and continuous further development of new knowledge, technologies and resources.

Among social service users, one group at risk of being left behind in the digital revolution is people with disabilities. They represent one of the most vulnerable and marginalized groups who are facing many digital barriers. As reported in the publication “An inclusive digital economy for people with disabilities”, despite the fact that digital tools can enable people with disabilities to manage different tasks of their daily life and access to the labour market through employment digital platforms, “if they do not possess the required skills, if they find ICTs unaffordable or if digital tools are not accessible, people with disabilities will not benefit from these opportunities and are therefore at risk of being left behind.”¹

This analytical paper presents the results of research focused on the one hand to analyze the current context of European policies and initiatives aimed at fostering a digital society and on the other to

¹ “An inclusive digital economy for people with disabilities” - A joint publication by Fundación ONCE and the ILO Global Business and Disability Network, developed within the framework of Disability Hub Europe, a project led by Fundación ONCE and co-funded by the European Social Fund.

https://disabilityhub.eu/sites/disabilityhub/files/an_inclusive_digital_economy_for_people_with_disabilites.pdf

identify the needs and challenges that the social sector is facing in achieving an effective digital transformation in this field.

The objective of this paper is to provide a range of resources, as well as recommendations, for staff working with people with disabilities and stakeholders across Europe to help them improve digital skills, use of digital tools to improve efficacy of services, with the final aim to contribute to improving the quality of life of social service users.

The research has been carried out at different levels and for different target (NGOs staff, service provision and care, management) to understand and address digitalization skills needs and barriers. It is a result not only of a desk analysis, but also of the contribution that EPR members and key stakeholders have given during the Annual Conference and other relevant events specifically focused on digital topics.

02.

THE CONTEXT OF DIGITAL SKILLS IN EUROPE

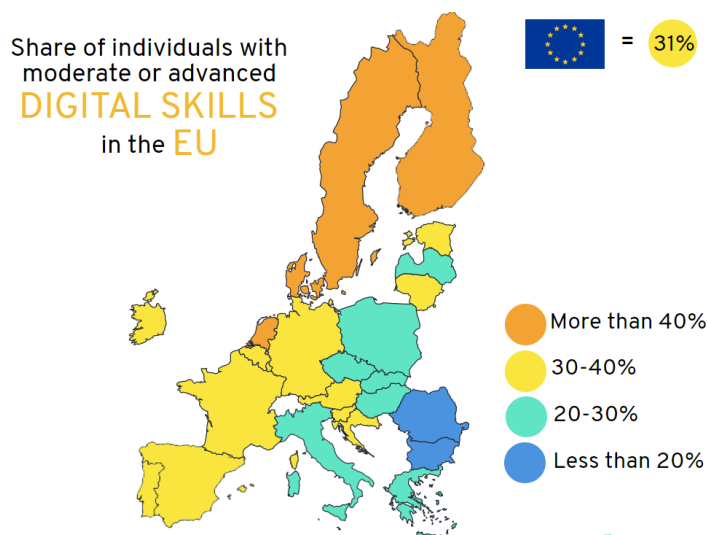
According to the *DESI Report 2020 – Human Capital*², the current COVID-19 pandemic has shown how important digital assets have become to our economies and how basic and advanced digital skills sustain our economies and societies. Although already 85% of citizens used the internet in 2019, prior to the COVID-19 crisis, only 58% possesses at least basic digital skills. Therefore, having an internet connection is not sufficient; it must be paired with the appropriate skills to take advantage of the digital society. Digital skills range from basic usage skills that enable individuals to take part in the digital society and consume digital goods and services, to advanced skills that empower the workforce to develop new digital goods and services.

Specifically, digital skills are measured through the human capital dimension, which takes into account 'basic Internet user skills' and 'advanced skills and development'. In this regard, Spain is below the European average in terms of digital skills. Conversely, Luxembourg, the Netherlands, and Sweden present the highest values in terms of Internet user skills, whereas Finland, Sweden and Estonia are the top performers in advanced skills and development. In contrast, Bulgaria, Romania, Italy, and Greece present the lowest scores in this dimension.

Throughout the last 4 years, the level of digital skills has continued to grow slowly, reaching 58% of individuals having at least basic digital skills, 33% with above basic digital skills and 61% of individuals having at least basic software skills. The skills indicators are strongly influenced by sociodemographic aspects. For example, 82% of young individuals (16-24), 85% of those with high formal education, 68% of employed or self-employed people and 87% of students have at least basic digital skills. By contrast, only 35% of those aged 55-74 and 30% of the retired and the inactive possess basic skills. It can be observed that, although European citizens are continually improving their digital skills, greater efforts are required in this direction.

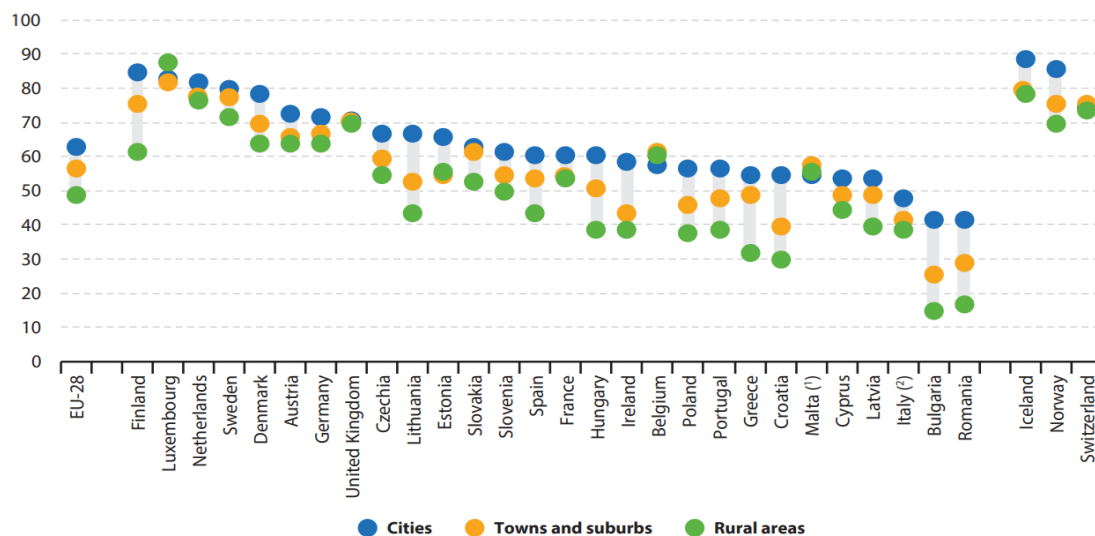
² "Digital Economy and Society Index Report 2020 – Human Capital" - <https://ec.europa.eu/digital-single-market/en/human-capital-and-digital-skills>

According to other research, presented by Cedefop³ during EPR's 2020 Annual Conference, it emerges that on average, in the European Union, every third citizen holds moderate or advanced level of digital skills. The map below shows that the best performing Countries and Netherlands. Whereas, in the Eastern and Southern Europe the level of advanced skills is slightly lower.



At regional level, the difference in the level of digital skills is more evident between people who live in cities and those who live in rural areas. The following graph shows that in some countries, like United Kingdom or Belgium or even Germany, there is not a large difference between cities and rural areas. Then, there are other countries, like Romania and Bulgaria (that performs worse) or Finland (that performs very well) where the difference between the urban and rural areas is quite significant.

Figure 9.2: People with basic or above basic digital skills, 2017
(%, share of people aged 16-74; during the 12 months preceding the survey, by degree of urbanisation)



Note: ranked on cities. Basic and above basic digital skills are the two highest levels of skills (compared with low skills or no skills). The indicator presented is a composite indicator covering four different skills domains: information, communication, problem solving and software skills. Individuals with basic and above basic digital skills have at least a basic level of skills for one of these four domains and do not have no skills across all four domains.

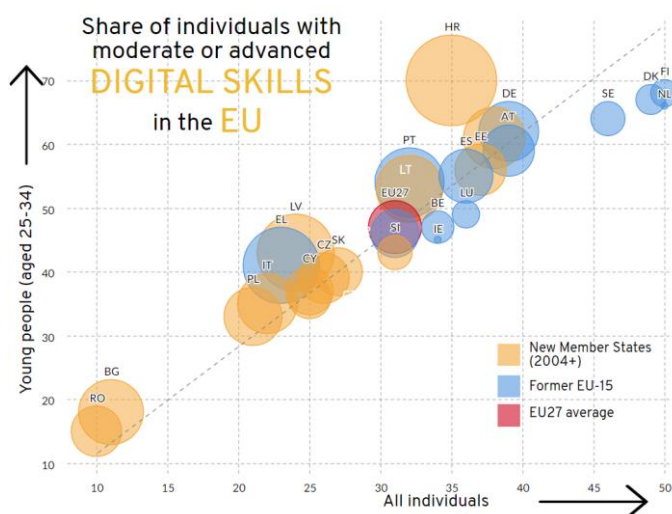
(*) Rural areas: low reliability.

(†) 2016.

Source: Eurostat (online data code: isoc_sk_dskl_i)

³ The research is based on data collected annually by the National Statistical Institutes and on the analysis of the EUROSTAT 20. <https://skillspanorama.cedefop.europa.eu/en>

The graph below shows the level of digital skills held by young people, aged from 25 to 34. On the vertical axis it indicates the level of digital skills. The average level of digital skills among young people is 50%, only in Croatia is higher than 70%. Whereas, the size of the bubble indicates which is the difference between the digital skills of young people and digital skills of all people in the country. In the EU-15 countries, western and northern Europe, the bubbles are smaller. This means that the level of digital skills does not differ a lot between young and older people. Indeed, these countries have implemented different actions to ensure a good level of digital skills among older people. The bigger bubbles show the edge that young people. While, in in the eastern and southern Europe the overall improvements in digital skills is driven mainly by many young people with digital degrees and studying ICT.



03.

BARRIERS AND CHALLENGES

The analysis of the digital transformation needs in the social sector has been conducted through a research from different information sources: online literature; discussion groups and workshops with EPR members, with external experts and with other stakeholders.

Different kind of challenges and barriers have been identified:

1. Digital skills gap

The average level of digital skills of the operators in the social sector is poor and not sufficient to provide a good quality service. Indeed, the social sector is very unattractive for highly skilled people and risks attracting only low skilled people. It is perceived as undemanding from a work point of view. This further contributes to attracting low-skilled people. Then, the average age of operators employed is increasing. These two elements lead to a widespread burnout among social workers, especially among those employed in structures supporting people with disabilities. It is evident that at the individual level, digital skills gaps act as a barrier to societal participation and exacerbate existing socio-economic inequalities.

2. Accessibility

It is one of the most relevant problems depending on the lack of adequate digital infrastructures and services (such as access to Internet, to devices, to software and applications etc.). This gap in usage and access to digital infrastructure and services increases significantly the digital divide. In particular, it mostly affects certain segments of population, such as people who have low income and/or live in rural areas.

3. Limited financial resources

The funding gap is another relevant barrier for the digital transformation of the social services sector. IT modernization and digital transformation require significant investments to cover additional costs which can occur, from the purchase of products, to suitable technology infrastructure, to the training or upskilling of staff as regards digital skills.

4. Unequal distribution of new technologies

According to the EPSU (European Public Service Union) “social services users, especially from below average economic and social backgrounds as well as the management and workers in the social services sector are currently largely excluded from a full participation in the digital opportunities that remain concentrated in the hands of a few powerful corporations”.⁴

5. Resistance to digital transformation

Uncertainty and fear of change can prevent individuals to use the ICT and digital tools in all its potential, since the approach towards the tool is often skeptical, and therefore people may not be willing to learn digital skills. Instead, working on attitude and mentality helps to ensure that technology is not suffered, but used to the fullest to facilitate the work. When this does not happen in the context of digital transformation, resistance increases and skepticism and fear of the future make it even more difficult to change established habits and ways of working.

04.

THE MAIN EU POLICIES FOR A DIGITAL SOCIETY

The European Union has designed and developed a digital strategy framework that provides a wide range of instruments, in terms of policies, legislations and funding to help Member States and stakeholders to create an inclusive digital society.

- The **Conclusions of the Council of the European Union on developing media literacy and critical thinking through education and training**⁵ highlighted the digital skills gap and discussed the importance of digital skills in the employment market.
- The **European Skills Agenda for sustainable competitiveness, social fairness and resilience**⁶ sets ambitious, quantitative objectives for upskilling and reskilling to be achieved within the next 5 years. It is a response to ensure people have the skills they need to deal with the green and digital

⁴ Joint Position Paper on Digitalisation in the Social Services Sector - Assessment of Opportunities and Challenges (Final Version, 6 June 2019), <http://sociaemployers.eu/files/doc/Draft-EPSU-Social-Employers-Joint-Paper-Digitalisation-V5-FINAL-06.06.19-EN.pdf>

⁵ Council conclusions on developing media literacy and critical thinking through education and training (30 May 2016) - <https://data.consilium.europa.eu/doc/document/ST-9641-2016-INIT/en/pdf>

⁶ <https://ec.europa.eu/migrant-integration/librarydoc/european-skills-agenda-for-sustainable-competitiveness-social-fairness-and-resilience>

transition. Its 12 actions focus on skills for jobs by partnering up with Member States, companies and social partners to work together for change, by empowering people to embark on lifelong learning, and by using the EU budget as a catalyst to unlock public and private investment in people's skills.

- The **Pact for Skills**⁷ is a shared engagement model for skills development in Europe. Officially launched on 10 November 2020 is aimed at support a fair and resilient recovery by mobilising resources and incentivising all relevant stakeholders to take real action to upskill and reskill the workforce, by pooling efforts and setting up partnerships supporting green and digital transitions as well as local and regional growth strategies.
- The **Digital Education Action Plan (2021-2027)** outlines the European Commission's vision for high-quality, inclusive and accessible digital education in Europe. It is a call to action for strengthen cooperation at European level to learn from the COVID-19 crisis, during which technology is being used at an unprecedented scale in education and training and to make education and training systems fit for the digital age.
- The **Digital Competence Framework (DigComp 2.1)**⁸ is a tool purposed to improve citizen's digital competence. Through the list of 21 standard competences the DigComp helps in self-evaluating the level of digital competence, setting learning goals, identifying training opportunities and facilitating job search.
- The European Commission also supports upskilling and reskilling in its Member States through funding from the European Social Fund+, the European Regional Development Fund, InvestEU, Recovery and Resilient Facility (RFF), REACT EU (Recovery Assistance for Cohesion and the Territories of Europe), Just Transition Fund (JTF), Erasmus+, Horizon Europe, Digital Europe and other relevant programmes of the new Multiannual Financial Framework (2021-2027).
- **'Shaping Europe's digital future'** is an initiative of the European Commission that is working to coordinate, complement and initiate measures to deal with every aspect of the coronavirus pandemic. Digital, media and telecoms play a fundamental role and the mission of this initiative is to make sure Europe has the infrastructure, the connectivity and the regulations in place to respond to coronavirus and to keep people active and safe online.⁹
- The **European policy cooperation (ET 2020 framework)** is a forum which allows Member States to provide opportunities to build best practices in education policy, gather and disseminate knowledge, and advance educational policy reforms at the national and regional levels. The framework is based on the lifelong learning approach. It therefore addresses outcomes from early childhood to adult vocational and higher education, and is designed to cover learning in all contexts: formal, non-formal and informal.
- **ET 2020 Working Group on Digital Education: Learning, Teaching and Assessment**¹⁰: is one of the ET 2020 working groups that are set up as part of the EU's policy cooperation process in education and training supporting common policy objectives. This Working Group discusses the purposeful and innovative use of digital technologies in education and training, and the development of digital competences. It examines how education systems can best respond to changes in society and a labour market driven by digital transformation, promotes good practices and the co-development of policy solutions.

⁷ <https://ec.europa.eu/social/main.jsp?catId=1517&langId=en>

⁸ <https://ec.europa.eu/jrc/en/digcomp>

⁹ Digital technologies - actions in response to coronavirus pandemic: <https://ec.europa.eu/digital-single-market/en/content/digital-technologies-actions-response-coronavirus-pandemic>

¹⁰ https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-working-groups_en

- The **European Vocational Skills Week** is a platform to make VET's potential more widely known, and an opportunity to exchange information and good practice across Europe and beyond. This year's theme is VET for Green and Digital Transitions, in line with the Commission priorities of a "European Green Deal" and a "Europe fit for the digital age".¹¹

05.

GOOD PRACTICES AND RESOURCES SHARED

A wide range of good practices, experiences tools and resources was shared by EPR members to provide examples that can support professionals in their acquisition and improvements of IT skills. Below there are relevant practices and tools to reach them:

- **Digital Skills Assessment Guidebook**¹²: practical step-by-step tool for national digital skills assessments. The guidebook can be used to determine the existing supply of a digitally skilled cohort at a national level, to assess skills demand from industry and other sectors, to identify skills gaps, and to develop policies to address future digital skills requirements. It is designed for use by policy-makers and other stakeholders, such as partners in the private sector, non-governmental organizations, and academia.
- **DigComp 2.1**¹³ is a tool developed by the JRC (Joint Research Centre), the European Commission's science and knowledge service, as a scientific project and with intensive consultation of stakeholders. First published in 2013, DigComp has become a reference for the development and strategic planning of digital competence initiatives both at European and Member State level. The current version is DigComp 2.1 and it focuses on expanding the initial three proficiency levels to a more fine-grained eight level description as well as providing examples of use for these eight levels. Its aim is to support stakeholders with the further implementation of DigComp.
- **Web Content Accessibility Guidelines (WCAG)**¹⁴ is a tool developed through the W3C process¹⁵ in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally. It is part of the **Web Accessibility Initiative (WAI)** which develops web accessibility guidelines, technical specifications, and educational resources to help make the web accessible to people with disabilities. WCAG documents explain how to make web content more accessible to people with disabilities. WCAG 2.2 is scheduled to be published in 2021.

¹¹ https://ec.europa.eu/social/vocational-skills-week/european-vocational-skills-week-2017_en

¹² <https://academy.itu.int/index.php/main-activities/research-publications/digital-skills-insights/digital-skills-assessment-guidebook>

¹³ <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-21-digital-competence-framework-citizens-eight-proficiency-levels-and-examples-use>

¹⁴ <https://www.w3.org/WAI/standards-guidelines/wcag/>

¹⁵ The World Wide Web Consortium (W3C) develops web standards such as HTML, CSS, etc. WAI (Web Accessibility Initiative) is part of W3C and follows the W3C Process for developing web standards.

- **Digital Nonprofit Ability (DNA) Assessment**¹⁶ is an assessment tool which allows organizations to make decisions about how to begin their digital transformation.
- **Digital Capabilities Statement**¹⁷ is a practice framework that outlines the knowledge, skills and values that social workers should have in order to use digital technology in practice with adults, children and families in England. This framework is aimed to: assist social workers with practice judgements and decision-making, support social workers to meet the needs of adults, children or families who use or could benefit from digital technology, support trainers and educators to consider how to strengthen social workers' understanding of the role of digital technology in social work.
- **Por Talento Digital**¹⁸ is a permanent training program in digital skills and technological professions of the ONCE Foundation aimed at improving the employability and competitiveness of persons with disabilities in the increasingly digitalized labor market. Its training actions provide digital literacy to persons with disabilities, upskilling training aimed at increasing labour opportunities in non-tech jobs that require certain digital skills to be performed, advanced training for specific jobs in the digital or technological field.
- **23 Things – Digital skills for social services workers**¹⁹ is a training programme for social services workers. This resource covers 23 digital capabilities to support practice and learning in social services and has been put together from free educational material provided by the University of Edinburgh.

The list is not exhaustive as there is a huge variety of digital tools and practices available online. Indeed, many digital platforms or websites are specifically designed to collect them in order to better help and facilitate the users in the choice of the programs that best match their needs. Here listed some excellent examples of collections of resources:

- **DG EAC repository of online tools:** it is a selection of online resources and tools for learners, teachers and educators during the outbreak of COVID-19²⁰.
- **How VET stakeholders are facing the COVID-19 emergency** is a document published by the European Commission to bring together a list of initiatives put together from different sources: main initiatives of international organisations active in the field of education and training; resources shared on various EU platforms; resources shared through surveys; resources identified by the ET 2020 Working Group on Innovation and Digitalisation in VET.
- **UNESCO** has published a list of educational applications, platforms and resources²¹ aimed at facilitate student learning and provide social care and interaction. They tend to have a wide reach, a strong user-base and evidence of impact. They are categorized based on distance learning needs, but most of them offer functionalities across multiple categories.
- **HundrED** is a network of innovators, has published a collection of 30 simple, yet effective solutions that help parents, teachers and children navigate through the plethora of challenges facing education during the pandemic. From the opportunity for teachers to form much stronger connections with

¹⁶ <https://solutionscenter.nethope.org/the-center-for-the-digital-nonprofit-survey>

¹⁷ <https://www.scie.org.uk/social-work/digital-capabilities/capabilities-statement>

¹⁸ <https://portalentodigital.fundaciononce.es/>

¹⁹ <https://www.careinspectorate.com/index.php/knowledge-hub-wiki/2-uncategorised/3929-23-things-digital-skills-for-social-services-workers>

²⁰ https://ec.europa.eu/education/resources-and-tools/coronavirus-online-learning-resources_en

²¹ <https://en.unesco.org/covid19/educationresponse/solutions>

parents, students (especially for students with disabilities) to challenges of untrained teachers and lack of access to digital learning resources, the report has plentiful insights and resources²².

- **EPALE (Electronic Platform for Adult Learning in Europe)**²³: is a European, multilingual online community of adult learning professionals, including adult educators and trainers, guidance and support staff, researchers and academics, and policymakers. This platform provides different kinds of contents as well as professional developments tools to support and strengthen the adult learning professions. It enables members to connect with and learn from colleagues across Europe, through its blog posts, forums, the Partner Search tool, complemented with physical gatherings. Specific sections are focuses on collecting resources to support digital transformation of adult education, digital skills development and training for people with disabilities.
- **The Digital Skills and Jobs Coalition**²⁴ organizes thematic webinars with the National Coalitions and their members. During these sessions, the participants share their challenges, solutions and experiences in response to the sudden need for digital skills among Europeans. These initiatives cover various topics surrounding the new context in which teachers, students, SME owners, employees, self-employed and citizens find themselves. Different initiatives and good practices identified and collected by the National Coalitions are kept and updated on the Digital Skills and Jobs Coalition webpage.
- **Online platforms for teachers and educators** is a digital platform that provide a range of online EU-supported platforms for teachers and educators during the outbreak of COVID-19.²⁵
- **Digital Capabilities for Social Workers** is a project aimed to help social workers to be confident using digital technology and data to support their increasingly evolving role. A collection of resources that define what the digital capabilities are, while providing examples and tools, is provided

06.

RECOMMENDATIONS

One of the greatest challenge in the social sector is the digital and technological transformation. Although digitalisation presents important issues for social service providers and their users, the use of technology in social field has become a valuable tool and its advancement should be considered as an opportunity.

The Council of the European Union has addressed digital skills in their conclusions relating to education and training, and the Europe 2020 strategy considers ICT a key element in education reform. Nevertheless, the digital transition calls for strengthening these policies through concrete actions to train European citizens, to promote life-long learning, to improve the quality of the services, support efficient management and organizational functioning.

→ Development of digital skills

²² <https://hundred.org/en/collections/quality-education-for-all-during-coronavirus>

²³ <https://epale.ec.europa.eu/en>

²⁴ <https://ec.europa.eu/digital-single-market/en/news/digital-skills-and-jobs-coalition-compiles-digital-skills-resources-and-best-practices>

²⁵ https://ec.europa.eu/education/resources-and-tools/coronavirus-online-learning-resources/online-platforms_en

High quality education and training initiatives are key to develop digital skills at all levels. This requires a greater commitment to support the acquisition of these competences and is one of the best investments a society can make. The implementation of financial resources, both public and private ones, is required to grant initiatives and effective education and training programmes that foster digital skills of individuals and that can be adapted to the current needs of social workers and service users.

→ ICT integration

The integration of ICT in social sector is fundamental to reinforce the quality of the services provided and to achieve a better quality of life of service users together with the actors involved. There are various ways to integrate ICT in social work practice: e-practices (e.g. emails, videoconferences) jointly with face-to-face interventions; web-based programmes and programmes supported by robots, gaming, or 3D virtual realities.

→ Assessment of digital skills

The evolution of digital skills should be measured accurately in order to analyse their development. Several professions have established the need for digital skills per role or function. Indeed, the definition of a system to measure social workers' level of digital skills based on their roles and functions could be a useful practice to increase the digital skills required on the profession. To quote an example, the Health and Care Digital Capacities Framework and the Professional Capacities Framework could both be useful in this context. Both frameworks have been developed in the UK to highlight not only the importance of digital literacy, but also other key aspects of social work.

→ Accessibility and digital inclusion

Another huge challenge is the accessibility to digital resources and means. We have to work hard to achieve it. It is fundamental that European and national authorities give priority to the needs of the social services users, workers and providers to benefit from full access to technologies and their opportunities, thus supporting the right to the best possible care, education and training, social support and empowerment and therefore contributing to the implementation of the European Pillar of Social Rights.²⁶ Adequate infrastructures, such as broadband, should be available with no geographical discrimination.

Also, service providers and policy makers need to work in a connected and complementary way, fostering targeted actions and guidelines to implement accessible and inclusive ICT solutions.

→ Overcoming resistance to digital transformation

We encourage from one side the implementation and exchange of guidelines, toolkits and successful practices. On the other side, we have to overcome the mental barriers in implementing these practices on the ground. Many social service providers that are moving online and into different ways of working, are still not ready to deal with accessibility and the use of technology. It is necessary to rethink the approach to the digital field through an integrate, innovative and inclusive process that respect and support diversities.

→ Raise awareness on digital inclusion

Furthermore, it is fundamental to raise awareness and engage a plurality of stakeholders of the digital society at local, national and European level to make targeted initiatives and programmes supporting non-profit organizations, employers, schools and community organizations in the digital transition. While

²⁶ EPSU - Joint Position Paper on Digitalisation in the Social Services Sector - Assessment of Opportunities and Challenges (Final Version, 6 June 2019), <http://socialemployers.eu/files/doc/Draft-EPSU-Social-Employers-Joint-Paper-Digitalisation-V5-FINAL-06.06.19-EN.pdf>

education and training policies fall in the sphere of competence of Member States, the EU have to strengthen the support of human capital development by promoting cooperation and the exchange of best practices among Member States, and through targeted financial investments.