Adult Community Media Lab

IO1-Smart Learning Environment - EN
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Contents

About the course

Introduction

As an adult, you need to know what Digital Social Services and Education means in order to:

• Relate digital social services and education to the socio-economic, technological, political and environmental demands of your society.

• Relate content or the body of knowledge to your local setting.

• Apply the most effective and relevant social services and learning methodologies.

• Evaluate teaching and learning processes.

Content:

The emergence of new problems with globalization brings the need for innovative practices of social work to produce solutions and intervene to these problems. It is possible to say that the planning and implementation of social work with an innovative approach and in a way that can meet the needs will also have a significant impact on social change. Digital Social Services needs to go beyond traditional methods in order to share new information that it wants to convey to people who will benefit from the theoretical approaches and practices, therefore this course has been planned.

Summary

This course will provide you with proficiency in digital social work practices that are becoming increasingly widespread in the public sphere with technology, can adapt to changes, produce effective and timely solutions to changing and diversifying needs, and have an innovative understanding. In order to benefit from digital social services, a person needs to know what these services are and how to use them most effectively with their advantages and disadvantages. For these reasons, this course will be;

An overview of policy initiatives at EU and national levels that promote the take-up of digital technologies in social care services and education. This overview includes digital transformation strategies, changes in legislation and other types of policy reform. And also, describing some of the drivers, rationales and objectives underlying these policy initiatives, the stakeholders and organisations promoting them, and the barriers encountered in their implementation.

This course is organized to increase the knowledge and skills of adults on digital social services.

Learning Objectives

Each trainee who successfully completes the Digital Social Services Aspects and Educational Aspects course will be able to;

• Provide competence in the multidimensional aspects of Digital Social Services.

• Securely access Digital Social Services.

• Understand the main barriers and limitations in accessing Digital Social Services.

• Learn the methods and techniques used in the combination of Technology and Social Services.

• Describe policy initiatives at EU and national levels that promote the digital transformation of social services and education.

• Define the digital technologies that are currently in use in social services and education.

• Understand some of the evidence regarding the impacts of digital technologies for service providers and service users.

Basic Concepts (Key Words)

▪ *Social Work*	▪ *Drivers and objectives*
▪ *Social Service*	▪ *Digital literacy*
▪ *Digital Tools*	▪ *Co-creation*
▪ *Digitalization*	▪ *Funding gap*
▪ *Digital" by default*	▪ *Advanced robotics*
▪ *User-friendliness*	▪ *Internet of Things*
▪ *Single point of entry*	▪ *Telecare*

Main Objective

This course has been prepared to provide basic knowledge and competences in the field of digital social services by serving as a bibliography in order to learn and use digitalization, which is the goal of the ACML project, for adult people who want to gain competence.

At the end of training, the expected objectives of this module are:

- to promote the awareness and understanding of digital social services and education

- to decrease the malicious use of digital technology in social services and education

- to stimulate new policies to sustain digital literacy for social services and education

- to improve and expand the use of online learning practices in the field of adult education

General Description

The primary target group of this course is represented by adults who are interested to improve their knowledge on digital media and would like to spend the acquired knowledge to support children, older adults, and low-skilled adults to use digital technology.

Bu modül yetişkinlerin digital sosyal services and education alanında yeterlilik kazanmalarına odaklanır. The structure of this learning unit consists of five sub-topics:

S1: Describing digital social services and policies (definition, basic principles, standards)

S2: European Union and Digital Social Services (European role,framework,digitilasation)

S3: Defining Digital Technologies used in social services(benefit, challenges)

S.4:The role of digital technologies in the design and delivery of social services.

S.5: Digital transformation in education and educational aspects of social services.

This module has been prepared to provide basic knowledge and skills about digital social services and its educational aspects, and it has been prepared for every adult who wants to improve themselves digitally and who wants to transfer the knowledge they have learned to the target group so that they can participate without any prerequisites.

Learners will be required to take an objective-type assessment at the end of each quest and score a minimum of 70% to earn the course completion certificate. The test can be taken multiple times by learners. The assessment will check the learner’s understanding of the concepts covered in the quest as well as the learner's ability to apply the concepts in real-life situations.

PRE-TEST

1) Which of the following could be the definition content of digital social work?

a) consists of classical methods

b) be independent of society

c) be static and unchangeable

d) ability to adapt to social changes

2) Which of the following is not one of the basic principles of digital social services?

a) User friendliness and inclusiveness

b) 24/7

c) Single entry point

d) Queue

3) Which of the following is the driving force for digital social work transformation?

a) Increasing the cost

b) Prejudice on digital

c) Increasing the quality of life

d) Limiting communication

4) Which of the following digital social services do you use?

Advanced Robotics		Artificial Intelligence	
Google		IOT	
Telecare		Blockchain	
Virtual Reality		Amazon	
Skype Web		Platforms	

1.DESCIRIBING DIGITAL SOCIAL SERVICES AND POLICY INITIATIVES AT EU AND NATIONAL LEVELS

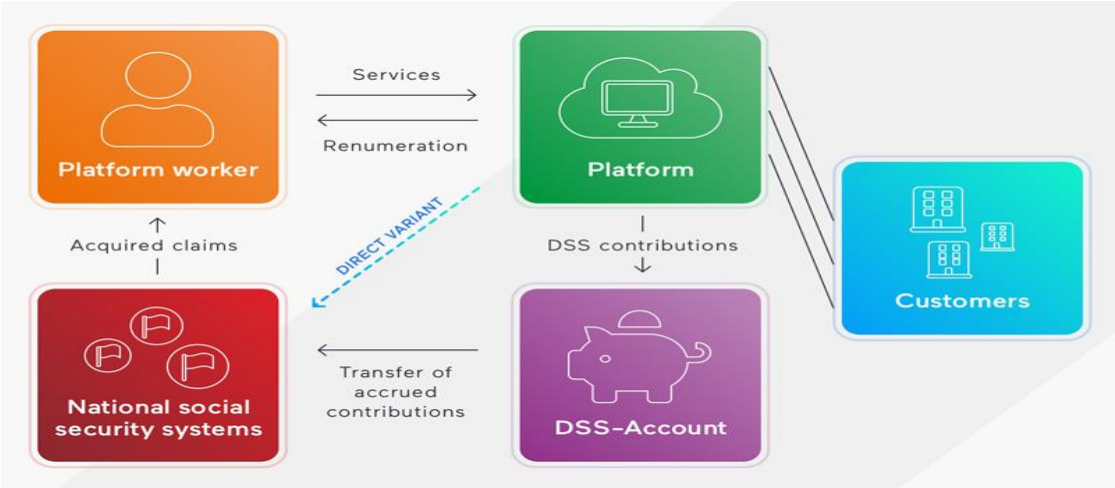
Summary of topic:

In the first chapter of this module, the basic principles and standards of digital social services and education will be explained, information will be given about digital social services and trainings given in Europe and nationally, and sampling will be made.

What is Digital Social Services?

1.1 In order to understand what Digital Social Services is, it is necessary to define social work first. Social Work is a profession that focuses on the development of disadvantaged individuals and groups in social life and works to increase the social welfare level of the society. Social service is based on problem solving, empowerment and liberation in human relations in order to increase the well-being of individuals, families, groups and societies by focusing on the interaction within the individual and his environment (IFSW, 2000).

Today, there is a rapid change in economic, social, demographic, cultural, technological and many other areas. Adapting to these changes, producing effective and timely solutions to changing and diversifying needs is possible with social service organizations with an innovative understanding. Information technology applications, which have been used in social services since the last twenty years, promise important innovations to professionals at micro level, institutions and/or organizations at macro level. The dynamic nature of social work practice requires the profession to find new and creative ways to continually evolve and support disadvantaged groups. It is believed that unless innovation is on the agenda of the services provided, future performance will be inefficient and ineffective (Brown, 2010). In this sense, the concept of "Digital Social Services" is, where it is important to determine the target audience and to have a good project, to provide digital solutions to social problems, to seek to solve problems with innovative methods, how to solve the needs of disadvantaged individuals and groups with digital tools, to reach more people and solve their problems with low costs that appears to be met.



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1.2 A Common Definition of Digitalization in Social Work

In general terms, digitalization can be defined as the massive adoption of digital technologies to generate, process and share information and to implement certain tasks through digital

devices. This may include tasks previously performed by the human workforce. Digitalization in social work means the incorporation of digital technologies into the daily delivery of social work. As a profession, social work is faced with social changes and developments. It is clear that digital transformation is affecting the work of social organizations. However, it has been observed that social organizations partially underestimate the rapid dynamic of this digital transformation, which affects all dimensions and services of social organizations. Social work requires a strategic process to deal with the complexity and challenges of digitalization. (Kreidenweis, Helmut (2019): Digital Transformation - Fundamentals, Strategies and Frameworks. In: Archives of Social Work Science and Practice. Social work in digital transformation. 02/2019, p.6ff. The transformative effect of digitalization, developments in social service delivery are accelerating.

Some of the effects of digitization are;

•Automation of tasks and occupations: replacing (human) workforce input with digital and machine input, including advanced robotics, artificial intelligence and machine learning.

•Digitization of processes: digital processing, storage and transmission of sensors and information as well as personal data, including the Internet of Things, 3d printing, virtual reality, augmented reality and telecare.

•Emergence of platforms and use of blockchain: delivery of services on online platforms.

•Digital documentation systems: eg. electronic patient files accessible by the caregiver via smartphone and tablet.

•Introduction of artificial intelligence and robotics: eg. Patient support assistants, home and care robots.

•Assistance and monitoring systems: eg. emergency buttons, drop sensors, etc.

• Big data use to support personalized services.

1.3 Basic principles and standards of Digital Social Services

• ***"Digital" by default***: In any interaction between the Social Service Provider and users of a particular service, the user is obliged to use the digital channel, unless there are better alternatives or reasons.

• ***User-friendliness and inclusiveness***: This means that digital public services must be accessible to everyone, not just a few technicians or digitally savvy people. Digital utilities should use an intuitive user interface that is easy to navigate. More importantly, while utilities are digital, they always provide ongoing human support in any form (face-to-face or via digital channels).

•***"Only once"***: This means eliminating the unnecessary administrative burden that arises when users have to provide the same information to multiple public administrations. The databases of all public authorities are interconnected and the stored information can be used by the other. While this is designed for the convenience of citizens, it should be done in strict accordance with data privacy rules and ultimately citizens should be in control of their personal data. This principle, underlined by the European Commission, is that in more than half of the cases Users are required by the administration to fill out forms with the information already available. Finally, an astonishing 73% of public service websites do not have a mobile-friendly version.

• ***Transformation Focus Center***: This principle requires social service providers to renew their entire government computing systems after a certain period of time in order to keep up with the ever-changing environment and the development of technology. While it may seem like an expensive solution, it ultimately pays off with improved operational efficiency.

• ***24/7 Technology***: Digital social services do not stop working after 6 pm and do not close on weekends. This includes the use of a digital interface ("digital front office") and digitizing processes to be available at all times.

• ***Single point of entry***: For user convenience, public services should be accessible from a single portal via a single identity.

• ***Multi-channel services***: Regardless of which device (desktop or mobile device) is used to access the portal, the user must be provided with a seamless digital public services experience.

• ***Open standards***: The service-oriented architecture of living public services is supported by open standards and open source technologies that enable digital collaboration. In particular, common standards and interfaces should ensure smooth data exchange. This principle of open standards and interoperability to enable the cross-border functioning of public services is critical in Europe and represents an important building block in the Digital Single Market strategy.

Table 2: NLASW (2012) Technology Use Standards in Social Work Practices

Standard 1: The use of technology in social work practice is based on the values, ethics and principles of the social work profession.
Standard 2: Social workers practice within their competence and competence in the use of technology in the workplace while continuing to develop their knowledge, skills and abilities.
Standard 3: As part of the informed consent process, social workers inform clients about technologies used in the delivery of social services, including the inherent risks and opportunities.
Standard 4: Social workers; documents all electronic communications in accordance with

institution/organization policies, ethical standards and best practice guidelines.
Standard 5: Social workers have a responsibility to be aware of issues in their jurisdiction when providing therapy or social services using electronic technologies.
Standard 6: Social workers who use technological approaches to conduct social work research or gather information needed for practice do so in a way that ensures ethical credibility.
Standard 7: Social workers consider issues related to conflicts of interest, bilateral and multiple relationships, and boundaries regarding the use of technology in practice.
Standard 8: Social workers who use technology to engage in social justice issues and advocacy efforts and/or engage in political action are committed to the values and principles of the social work profession.

2.THE EU AND DIGITAL SOCIAL SERVICES

Summary of topic:

In this chapter of the module, the work of the European Union in the context of digital social services will provide information about its effects on the society, and will serve as a data source about the work to be done for the local services to reach the international form.

2.1 What is the European Union's role in addressing digital social services policies?

This section will describe policy initiatives at the national and EU levels that support the digital transformation of social services. These initiatives include legislative change, strategies, policy statements, guidelines and funding programs in different types of public policy. Since the day it was founded, the European Union (EU), which has steered restructuring efforts within the framework of many objectives such as unity, peace, order, integration, livable environment, and sustainable development, has recently been the driving force of the European Union (EU) in this regard, dissemination of digital developments in social work and public administration and permanent development efforts are made.

Some of the studies that will help draw a frame in minds about what digital social services are are as follows;

1. The EU Commission published its first biennial report on social services for the public interest in the EU in 2008 and drew a general framework.

Report:

• Defines the socio-economic role of such services and the major economic and societal changes they have to adapt to,

• examine how they adapt to evolving needs and constraints,

• assess how these changes affect the organisation, financing and provision of social services of general interest in terms of relevant Community rules.

2. The Council of Social Work in Education 2008 emphasizes the importance of technology in the practice of social work and education. Many social work agencies now use computers to manage information systems, increase the efficiency and usefulness of their activities. Without technology, the practice of social work today would be ineffective and inadequate. A number of challenges have been identified in the context of restructuring public social services from the perspective of the European Union, and the use of digitalization and ICT seems essential as an effective tool for these modern services.

3. The European Union e-Government Report 2015 revealed that online public services in Europe “could be smarter”. This recent study showed that cross-border connectivity in Europe is still a challenge: only 57% of public services are accessible between countries, highlighting the need to include EU citizens in other member states.

The EU-recommended "live public services" are insightful and predictive services powered by data analytics, delivered as applications on mobile devices. Cloud infrastructure is used to make decisions in real time and to use and rely on generally open data. But getting the most out of these advanced, user-friendly services will require more: a cross-enterprise platform that can unite users and service providers in one safe, secure and easy-to-access location.

The EU's inclusive digitization principles and objectives are set out in the Digital Single Market Strategy. This strategy expresses the need for better to maximize service potential in public services. (European Commission, 2016). This strategy consists of 3 main objectives;

• modernizing social services with ICT using key digital enablers,

• enabling cross-border mobility with digital social services

• designing a more collaborative, participatory, accurate service that facilitates digital interaction between governments and citizens/businesses.

The "Future State Digital Technology" published within the framework of the European Digital Forum Government of the Future How Digital Technology Will Change the Way We Live, Work and Govern, which was created to receive the opinions of the public within the framework of the 2016-2020 Digital Social Work Action Plan of the EU Commission. According to the study titled "How It Will Change Our Lives, Work Life and Management Style", rapid technological changes that occur in economic and social structures naturally affect states, and states are forced to change shape and digitalize in providing social services.

VII of the European Union 2020 strategy entitled 'The benefits of ICT for the EU society'. According to the column, ICT will positively impact the reduction in energy consumption, support for aging citizens, healthcare and better public services delivery.

The EU is working to help public administrations across Europe transition to digital so that all citizens can enjoy smart public services throughout the Digital Decade. It focuses on reducing barriers to public services and making them accessible across borders.

The European Union 2021 Report emphasized the importance of digitalization for the European society in the COVID-19 epidemic. Digital technologies bring new ways to learn, entertain, work, explore and achieve goals. It also provides new freedoms and rights and gives EU citizens the opportunity to go beyond physical communities, geographic locations and social locations.

Digital public services indicators in DESI

Table 1 *Source: DESI 2020, European Commission.*

	EU	
	DESI 2018	**DESI 2020**
5a1 e-Government users % internet users needing to submit forms	**58%** 2017	**67%** 2019
5a2 Pre-filled forms Score (0 to 100)	**53** 2017	**59** 2019
5a3 Online service completion Score (0 to 100)	**85** 2017	**90** 2019
5a4 Digital public services for businesses Score (0 to 100) - including domestic and cross-border	**83** 2017	**89** 2019
5a5 Open data % of maximum score	**NA**	**66%** 2019

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2.2 Digitalisation at national level Time for action: from European to local level

2.2.1 Drivers and objectives

There are four factors for a transformation to digitally enable public services;

1. First, we are only halfway through a decade of unprecedented austerity in public spending. The need to find efficiencies that simply cannot allow services to be stopped will necessitate radical reforms hitherto considered too difficult.
2. Second, the public is willing to engage digitally. Most of us have created our own personal digital ecosystem by combining mobile technology, apps, and networks with

near-constant connectivity. This ecosystem is highly trusted and highly skilled by each of us.

3. Third, the technology and connectivity that support these personal ecosystems are relatively inexpensive, easy to use, and available almost everywhere.
4. The last factor is the need for innovative approaches to solving social problems that will help improve the population's quality of life, reduce the cost of providing services, and involve large segments of the population in mutual aid processes.

At the local level, digital transformation is promoted in all areas of social work through the Partnership in the Digital Transition project through the Urban Agenda for the EU. Urban Agenda was established in 2016 to promote collaboration, digitalization and the use of ICT. Organized thematic partnerships across the EU in order to improve coordination between social services in local governments, to provide financing and to spread the use of Bits in all areas. The aims of the Digital Transition action plan are: to provide citizens with better public services, to support the exchange of good practices by taking advantage of the opportunities of European cities, to enable digitalization and European businesses to develop innovations and to create opportunities for global markets to create new job descriptions (European Commission, 2018e).

One of the main drivers of the use of digital technologies is the innovation of the design and delivery of public services and the expectation that some services will be cost-effective and more efficient (OECD, 2016).

Another important driver for digital transformation is the policies aimed at digitalization and the use of machinery in the provision of health and care services. It consists of innovative public and social services that eliminate the difficulties in front of the elderly population's self-sufficiency, demographic difficulties and the burden on supply.

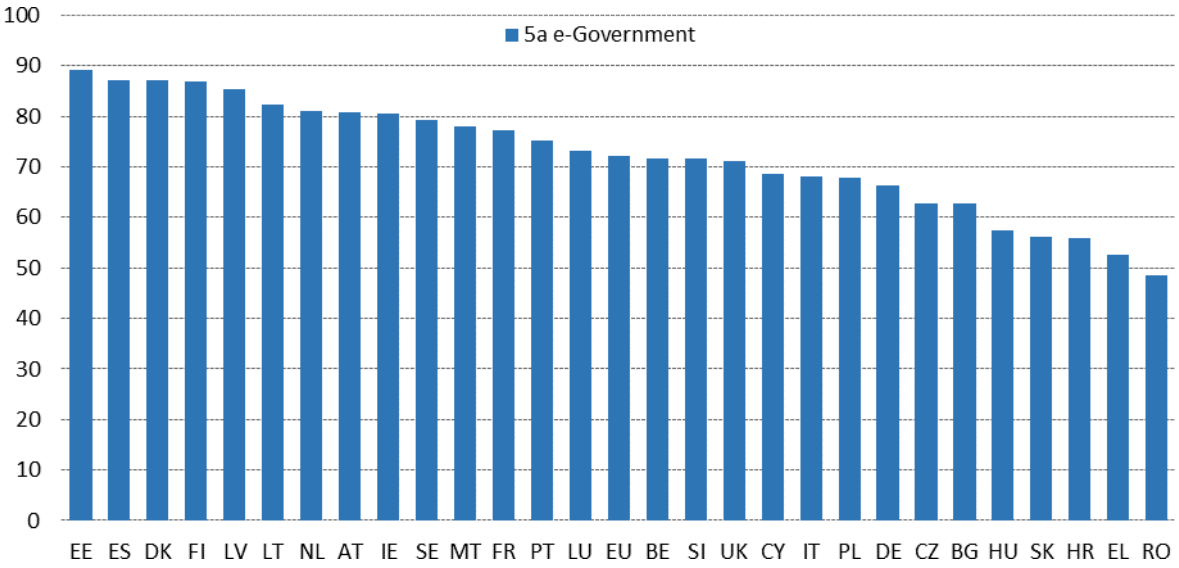
Norway's White Paper Tomorrow's Healthcare states that 'the increased use of welfare technology is opening up more possibilities'. It can give people the opportunity to manage their own lives and health, and help more people stay and be self-sufficient in their own homes longer, despite their disability" (Norwegian Government, 2012, pp. 27–28). The aim of the Innovations in Care Service 2020 (Pflegeinnovationen2020) program in Germany is to strengthen people's ability to stay at home and lead autonomous lives as long as possible (Bundesministerium fur Bildung und Forschung, 2014)

Digitally enhancing existing services (Mocker & Fonstad, 2017), engaging in product innovation (Berghaus & Back, 2017) and exploring new, potentially disruptive business models to stay competitive and reduce expense (Berghaus & Back, 2017; Mocker & Fonstad, 2017)) have been seen as targets promoting digital transformation. Other common goals are to keep up with changing service buyer behaviors and expectations, to improve and maintain user satisfaction and dialogue, to improve digital channels and processes towards them, and to offer up-to-date digital products. (Berghaus and Back, 2017; Bilgeri et al, 2017; Isaksson and Hylving, 2017; Mocker and Fonstad, 2017)

According to the Austrian association of health and social care professions (OGB/ARGE FGV); digital technologies aim to assign employees more efficiently, to provide faster access to clinical reports, and thus to provide more efficient care delivery.

Figure 1 Digital Economy and Society Index (DESI) 2020, digital public services

Source: DESI 2020, European Commission.



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3.DEFINING THE DIGITAL TECHNOLOGIES THAT ARE CURRENTLY IN USE IN SOCIAL SERVICES

Summary of the topic:

Digital technologies and technology tools used in the field of social services will be defined, information will be given about the difficulties and conveniences of digital social services, and the advantages and disadvantages of its use will be explained.

3.1 Main issues related to digitalisation

It is also emphasized that recommendations and opinions should be made in line with the development of human rights and social justice in digital technological processes, especially for providers of technological infrastructure and conditions, policy makers and practitioners. E.g; Social workers may face new ethical dilemmas regarding the disclosure of information to protect clients with the right to privacy and confidentiality online. In these processes, critical thinking, compliance with ethical processes and correct decision making skills should be adapted to digital challenges (Social Care Institute for Excellence, 2019)

• Resistance from staff and users

Common to staff and users alike, this problem is the rejection of technologies that replace or reduce human interaction. Even though many social services are provided digitally thanks to digital technologies, service providers and buyers have created a negative bias against it. These concerns have been reflected in some policy initiatives. In Austria, for example, the Digital Roadmap states: 'Technological solutions should be used as support and to improve quality and process optimisation, but should never replace personal communication, and this needs attention.' (Austrian Federal Digital, Ministry of Business, 2016, p. 30). A study conducted in Finland found that the main deterrent in barriers to citizens using social and health services is the belief that e-services are not as good as face-to-face communication. (63%) (Finnish Institute of Health and Welfare, 2014)

• Digital literacy

The reluctance to use digital technologies is partly due to a lack of knowledge and relevant skills. In 2018, EU countries received a CSR on low digital skills of the population. The ICT Strategy 2020 of the countries includes a series of measures for the digital struggle. Emphasis was placed on promoting the inclusion of the illiterate and the disadvantaged, as well as upgrading the internet skills of the general population (Le Monde, 2016).

• Data sharing and protection

The standards for collecting, managing and recording information about social services highlight the ethical standards that social workers must comply with when they use technology to collect, manage and store information.

The General Data Protection Regulation of May 2018 has set the requirements for the processing of personal data;

1. Data collection needs will be declared by social service providers and data will be processed securely, with the explicit consent of individuals. Where appropriate, pseudonyms should be used or data should be anonymized.

2. Social services data therefore face an additional level of complexity. For organizations that work with adults, this means they must seek approval to process; Where guardianship is required, permission must be obtained from legal guardians to process the data (The Guardian, 2018).

• User involvement/co-creation

Recruitment, acceptability and user friendliness of services are encouraged in digital services, and broader digital use should be created where people directly contribute to the process to increase user participation in co-design and decision-making. In the UK, for example, 'civil technology' is increasingly being used in local government to involve citizens. A review of these technologies has shown that user participation and uptake is limited, partly because the design of social services sets the limits of interaction (Crisis, 2018).

• Lack of resources and/or political support

In order to provide and expand Digital Social Services, financial support should be provided in a holistic manner, and adequate political support to the process should be supported by policies and facilitating services prepared by the state. In addition, hardware and technical in-service training should be given to service providers in this field. In Spain, the lack of investment and the inadequacy of the resources provided by the public authorities are the biggest obstacles to the providers of digital technologies. (Martinez Sans, 2017). In a UK Department of Health article, funding issues were noted as follows: Opportunities for assistive technology service providers face a lack of investment in many assistive technology services, lack of maintenance, the way to deploy them, and lack of awareness of assistive technology. (Volunteer Organizations Disabled Group and National Care Forum, 2013, p. 22)

• Technical problems

Access to the Internet is a prerequisite for the use of digital technologies. Eurofound drew attention to the need to improve broadband coverage and internet related issues. In many countries, a general barrier appears to be internet connectivity. It requires increasing data volumes. For big data-requiring digital technologies to be accessible to everyone, there must be high-volume broadband.

• Social Inclusion

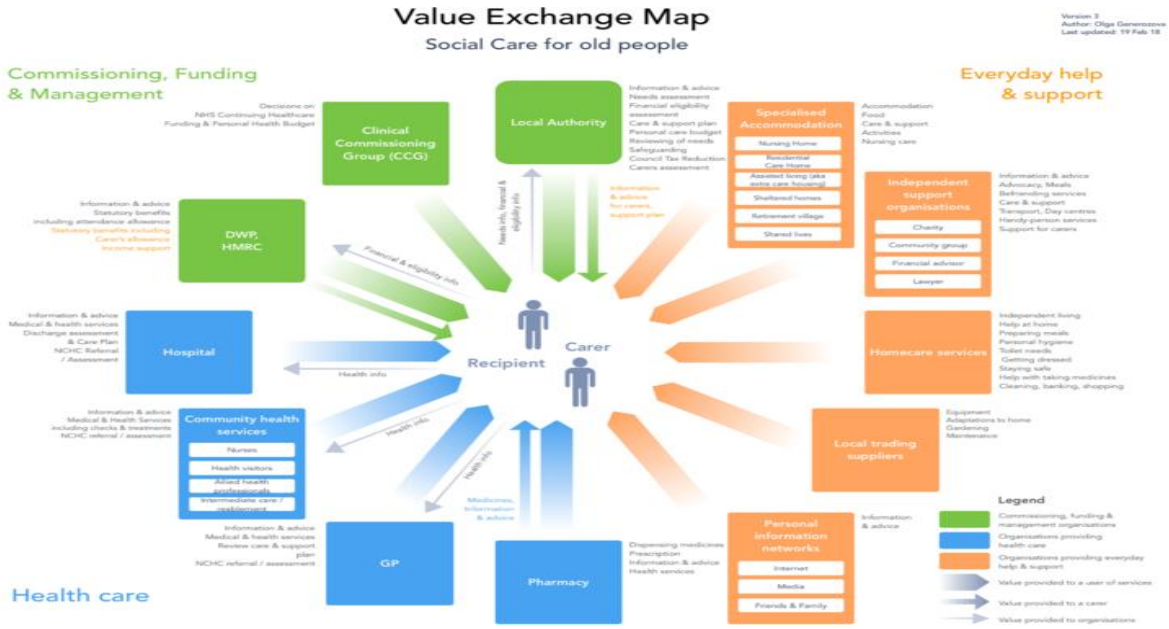
When we look at the working areas of social work, it is seen that it is mainly shaped by vulnerable, disadvantaged and marginalized groups such as the elderly, women, disabled people, refugees, on issues such as social assistance, poverty, migration, and social exclusion. When the characteristics of these client groups are examined, it is remarkable that they are more fragile and vulnerable in terms of structural, cultural, psychosocial, political and economic aspects. For this reason, individuals in these groups; They need access to human needs and rights, social justice, liberation, support and empowerment more than other individuals (Gencer, 2019). The client groups mentioned here also need to be protected and defended in digital environments.

3.2 BENEFITS OF DIGITAL SOCIAL SERVICES

Today, there are dramatic changes in socio-economic systems due to digitalization processes. In connection with this, the opportunities that arise in society can be used to improve the management of the social sphere. The implementation of innovative approaches to the

provision of social services using digital technologies will help increase public satisfaction, save costs associated with bureaucratic procedures for processing documents and overcome the lack of information. In the EU,

social services play a crucial role in improving the quality of life and providing social protection.



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The digital transition in social work can bring many opportunities such as:

• Existing improvement and quality enhancement: Digital technologies have the potential to improve old ones and create new services by better responding to the needs of service users. Redesigning social services around the needs of individuals provides the best opportunity to improve people's health, well-being and social inclusion.

• Promoting independence, quality of life and well-being: The use of digital technologies in social services can enable beneficiaries to maintain their independence and well-being and reduce social exclusion. The use of digital channels can also reassure caregivers and families who may not always live close to those they support, thereby reducing potential feelings of social isolation.

• Enable social workers to work from any base at any time: Technology can optimize workflows and business processes by enabling maintenance and support professionals to work seamlessly from multiple locations and in multidisciplinary teams. The use of mobile technology and improved connection speeds will provide quick access to information throughout the maintenance system. This means that maintenance and support professionals can work collaboratively across organizations and industries to deliver services more efficiently and effectively.

• Benefits include facilitating a practitioner's administrative responsibilities (Finn, 2006; Author, 2012), helping clients communicate and engage with the practitioner (Bradley & Hendricks, 2009), providing time to reflect on previous sessions (Wright, 2002), and providing an opportunity to help practitioners (Perron, et al. 2010).

3.3 CHALLENGES OF DELIVERING NEW DIGITAL TECHNOLOGIES IN SOCIAL SERVICES

The digital transition also brings many challenges;

The following main barriers to beneficiaries:

3.3.1. Trust yourself

Some participants have low trust in technology-oriented social services and do not feel adequately equipped to apply for digital social services.

3.3.2. Horror

Some worry that they will break devices, do something "wrong" that they cannot fix, or have privacy issues. It is also known from existing research that older adults are more vulnerable to misinformation.

3.3.3.Physical functionality

Some beneficiaries have physical disabilities. For example, for some, the text or buttons may be too small or visually impaired, so it is necessary to provide appropriate service for all disadvantages.

3.3.4 Culture and communication

Cultural differences in communication affect the way older adults use social media and their online connections. Some participants are more active social media users, while others are more passive. Some are worried about what they will encounter when using social media or do not like the way others communicate through social media.

The main obstacles in front of service providers are;

3.3.5 Data management:

The social services ecosystem is complex and structured with many public and private actors. Health and social data is very sensitive and does not only contain medical but also financial information about one's social protection situation or medical expenses. Yet, e-health apps are not regulated, and the data generally ends up within the remit of the GAFAs2. It is a priority to make sure that the introduction of new technologies and use of big data in social services is agreed and regulated through social dialogue and collective bargaining at different levels as well as through legislation that protects and regulates the use of such data by social services, including by its workforce. The use of technologies generates person-

related data, including on tracking movement of workers, that need to be dealt with in conformity with the General Data Protection Regulation (GDPR).

3.3.6. Digital skills:

Dealing with new technologies can require additional training and qualification, equipping workforce with an adequate set of skills and competences. One priority should be to holistically integrate digital skills into relevant education structures and professional training. Continuing Professional Development (CPD) throughout the worker's career can help to address the digital divide that prevents the workforce in social care (not least in the context of an ageing workforce) to fully take advantage of new technologies. This enables them to be adequately informed and consulted about related restructuring and – where they wish to do

3.3.7. Funding gap:

Limited financial resources are one of the biggest impediments for the digital transformation of the social services sector. Significant investments may be required to support the effective digital transformation and cover the full additional costs which can occur, such as the purchase of products, the recruitment and training of staff, and other important matters. This also calls for an assessment of the added value of specific measures

3.3.8 Uneven and unequal spread of new technologies:

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. Therefore, it is of paramount importance that European and national authorities give priority to the needs of the social services users, workers & 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.

3.3.9 Lack of social capital:

Finally, an individual's social network is highly influential in their initiation into using technology and is important for continued support and maintenance of the use of digital devices and social media. Often, without this available social network or device, individuals are unable to start using the digital device.

4 .THE ROLE OF DIGITAL TECHNOLOGIES IN THE DESIGN AND DELIVERY OF SERVICES AND IMPACTS OF THEM

4.1 THE ROLE OF DIGITAL TECHNOLOGIES IN THE DESIGN AND DELIVERY OF SERVICES

This chapter defines the digital technologies that are currently in use in social services. It also provides information about the aims and specific functions of these technologies, as well as some estimates about levels of deployment and how they are likely to change in the near future. Although the services analysed include services in cash and in kind, most of the uses of these technologies are in kind. Robots are used to assist older people and people with disabilities, helping them with physical, cognitive and interaction/emotional tasks. The Internet of Things and telecare have enabled older people to monitor their own health status and to live longer in their own homes. These technologies can also reduce the risk of contagion and ensure the continuity of care in times of confinement, lockdown and/or social distancing.

4.1.1 Advanced robotics

The research carried out by Eurofound on game-changing technologies in the service sector focuses on advanced robotics, defined as:

the improvements in machine dexterity and the machine's ability to interact with its environment, as a result of which robots can be engaged in tasks that go beyond repetitive, discrete motions. (Eurofound, 2019a, p. 3)

Dahl and Boulos (2013) provide a more detailed classification based on the functions of robots, settings and users:

- robots providing assisted logistics in hospital and care home environments
- companion robots in home and hospital settings
- robots as motivational coaches for following exercise plans and diets
- humanoid robots for entertaining, educating and improving the communication skills of children with special needs
- home assistance robots for older people

Given the large number of studies that show positive effects of either the robot or its placebo version, such as a non-functional robot or a pet toy, it is believe this type of devices hasmerits in elder care. Further, and of importance, the elderly seem to be open to this kind of technology.

4.1.2 Artificial intelligence

AI has been defined by the European Commission as follows: 'Artificial intelligence (AI) refers to systems that display intelligent behaviour by analysing their environment and taking actions – with some degree of autonomy – to achieve specific goals' (European Commission, 2018b, p. 1). AI can be considered as enabling and supporting other technologies described in

this chapter, as algorithms are often embedded in platforms and the Internet of Things, or it can be used to analyse data in blockchain or create software for AR/VR (Eurofound, 2020)

4.1.3 Internet of Things

The European Parliament defines the Internet of Things as ‘a distributed network connecting physical objects that are capable of sensing or acting on their environment and able to communicate with each other, other machines or computers’ (European Parliament, 2015, p. 2). This includes wearable devices and sensors worn on the body (for example, smartwatches) as well as other devices that can transfer data to one another without human interaction. The European Parliament considers the Internet of Things as a distributed network that connects physical objects, which can act or perceive the environment and communicate with each other, without human interaction and defines it as 'other machines or computers that can transfer data to each other' (European Parliament, 2015, p. 2). Their use is expanding in social work and health.

4.1.4 Telecare

The terms ‘telecare’, ‘telehealth’ and ‘telemedicine’ are often used interchangeably. A study documenting the use of telecare in Europe used the following definition: Telecare includes technical devices and assistive technology as well as professional healthcare services to assist, monitor and care for people from a distance. Telecare includes a variety of services such as communication, monitoring, consultation, diagnostics and training. (Pacita, 2014, p. 9)

The general objectives of telecare services are as follows (Government of Spain, 2017):

- promoting the permanence and inclusion of dependent people in the context where they normally live
- enhancing and keeping the degree of autonomy and independence of dependent persons at home favouring the safety and trust of dependent persons
- providing relief for dependent persons and their relatives
- serving as support for carers living with the dependent person

4.1.5 Blockchain

Blockchain is a database (ledger) operating in a distributed network of multiple nodes or computers that keeps track of data transactions (Wright and De Filippi, 2015). In the public sector, this technology allows transactions to be managed securely without the need for a third party. Other possible benefits from this technology for the public sector are more tailored services for citizens and greater transparency and trust in governments.

4.1.6 Platforms

Platforms are digital networks that coordinate transactions in an algorithmic way. There are three parties involved in a digital platform: the online platform, the client and the user. Digital platforms aim to conduct specific tasks or solve specific problems (Eurofound, 2018).

4.1.7 Virtual reality and augmented reality

VR is the simulation of an artificial environment in which users can interact with objects or other users. A headset can be used to simulate a highly immersive environment. AR adds layers of digital information over the physical environment, providing information but not creating the same degree of immersive environment as VR (European Commission, 2017b).

4.1.8 Simulation:

With Industry 4.0, simulations are expected to be an invariable part of their operations. Simulations present the physical world in production in virtual environments. Thanks to simulations, machine settings, machine setups, production tools and equipment layouts can be tested and optimized virtually (Rüßmann et al. 2015: 3).

Future trends

The Eurofound European Jobs Monitor shows that personal care workers in human health and social work activities accounted for 5.2 million jobs in Europe in 2018, making it the seventh-largest employer in the EU. This type of job experienced modest growth (2.8%) between 2011 and 2018. Furthermore, public expenditure in long-term care is estimated to grow to a greater extent than expenditure on healthcare or pensions (European Commission, 2018h). However, the wages for these types of jobs are in the 21st percentile, which is much lower than most of the other jobs employing large numbers in Europe (Eurofound and European Commission Joint Research Centre, 2019)

E-Social Services

Such differentiation of daily life makes it inevitable for social sciences and social work to face new areas of struggle at both micro, mezzo and macro levels. This situation necessitates "e-social work (Social Service 2.0)", in other words, social work to take an active role in digitalization processes in the face of digitalizing needs and emerging new problems.

The concept of "e" as a forename/nominal adjective specific to digitalization, as it is known, evokes the "electronic" (e-mail, e-school, e-government, e-pulse, etc.). Similarly, with the concept of e-social work, it is aimed to question the dimensions of electronicization/digitalization/virtualization and roboticization in terms of social work profession and discipline. When the literature is examined, it is seen that the concepts of "e-social work" and "online social work" are used in some sources and country examples. It is argued by Peláez and Marcuello-Servós (2018) that the concept of e-social work is included as a new frontier that affects social intervention as a whole, and it is a new field of expertise.

The concept of “e-social work” is undoubtedly just the tip of the iceberg in the digital transformation of social work. In this context, it is essential for a social work practitioner to be able to understand the digital society, social transformation and the new generation starting from his/her student years. Integration of social work into digital is not only a subject limited

to the level of professional practice, but digitalization in social work education should also be discussed and new methodologies should be implemented. In particular, the concepts of knowledge, skills and values, which are expressed as the hairpins of social work, need to be rethought together with the digitalization process and all components of the digital society. At this point, including information technologies in the social work education curriculum and developing the curriculum by taking into account digital transformation is one of the priority steps to be taken in terms of theoretical basis. In the implementation dimension, it is obvious that innovative and creative perspectives are needed. The interruption of students' attendance to application institutions in disaster situations such as the COVID-19 epidemic is just one of the examples that demonstrate the importance of using information technologies more. At this point, through a simulation program to be developed, it can be facilitated for students to experience the application steps with the help of digital tools (tablet, phone, computer, etc.). This process can be centralized and can also turn into a remotely managed phase with the participation of many schools.

4.2 THE IMPACTS OF DIGITAL TECHNOLOGIES IN THE DESIGN AND DELIVERY OF SERVICES

According to the managing director of the UK development group Places for People, ‘digital is about making life better for people who live in independent living and making life easier and simpler and it makes our services more efficient and cost effective’ (Appello, 2016, p. 8). This chapter presents some of the evidence regarding the impacts of digital technologies for service providers and service users. According to Reamer (2015), digital, online and other electronic technologies have significantly influenced the nature of social work practice and education. At this point, the need for the use of based processes an online service for clients, telephone counseling, video counseling, cyber therapy/avatar therapy, self-guided web-based interventions, electronic social networks technology such as (electronic social networks), e-mail and text messages has increased. In addition, with the age of digitalization and the COVID-19 epidemic, the online and distance education processes that have become visible will provide social work education. At this point, in the training and application processes some important contributions are also mentionedAccess of the effective use of digitalization to applicants and students living in rural areas facilitating participation and schooling for disadvantaged social workers. benefits such as facilitating and supporting digital literacy are emphasized (Trujillo, Bruce et al. Obermann, 2018).

4.2.1 Impact for work organisation and processes

4.2.1.1 Changes in work organisation and the nature of tasks

Even though blockchain is still in the early stages of adoption in the service sector, it may lead to the replacement of intermediaries, contracts and/or verification systems (Eurofound, 2019a). An important way to use digital technology and data effectively to support the increasingly complex roles of digital transformation and digital social workers is; It is to follow professional reports that improve digital skills, ethical principles that are updated from time to time, the experiences of stakeholder professions and institutions, blogs, webinars, videos, trainings and academic studies on the use of digital technology for the client group of social work (Social Care Institute for Excellence, 2020).

4.2.1.2 Changes in the cost of service provision

Technology Enabled Care services can cut care costs and increase the efficiency of care services, as evidenced by several local programmes (Independent Age, 2017).

Another benefit is that digital payments are more traceable than cash payments, thus allowing, where necessary, monitoring of spending in a more effective way (interview with the service provider). Improvements in the detection of welfare fraud are another way in which digital technologies contribute towards greater efficiency and savings.

4.2.2 Impact for service users

4.2.2.1 Security, independence and inclusion

Many studies identified by the Network of Eurofound Correspondents indicate that digital technologies increase service users' sense of safety. A summary of projects and services in Norway using security and tracking welfare technologies for older people and people with chronic diseases indicated that the use of these technologies contributes to an increased sense of security and sense of accomplishment among users (Knarvik et al, 2017)

4.2.2.2 Service quality and efficiency

The experiences of users in relation to the technology provided were positive: they felt less lonely, more secure and more connected. The service providers (such as social workers, nurses, students) who developed the content of the programmes and assisted the older people found the project to be very useful and convenient. It is also showed that the need for increased involvement of service users in consultation with staff, as face-to-face consultations provide much more information and enable the performance of some tasks that are not possible via television screens; for example, if a client needs to measure their blood pressure for the nurse or show their surroundings to the social worker.

5. DIGITAL TRANSFORMATION IN EDUCATION IN THE PROCESS OF SOCIETY 5.0 AND EDUCATIONAL ASPECTS OF SOCIAL SERVICES

Education and training are the best investments in Europe's future. They play a vital role in boosting growth, innovation and job creation. Europe's education and training systems need to give people the forward-looking knowledge, skills and competences they need to innovate and prosper. They also have an important role to play in creating a European identity, building on common values and cultures. Education should help empower young people to articulate and engage, participate and shape the future of a Europe characterised by democracy, solidarity and inclusion. Digital technology enriches learning in a variety of ways and offers learning opportunities, which must be accessible to all. It opens up access to a wealth of information and resources.

5.1 What is Adult Education and Digital Education?

Adult education is a highly developed sub-discipline of education. To change the “knowledge, attitudes, values and skills” through which adults go through a systematic and continuous learning activity (Darkenwald & Merriam, 1982).

Adult education and training is an integral part of the right to education and lifelong learning and includes 'all forms of education and learning aimed at enabling all adults to participate in their communities and working world'. It refers to all learning processes in formal, non-formal and informal organizations and communities in which those who are recognized as adults by the society in which they live develop and enrich their ability to live and work both in their own interests and in the interests of their communities. (UNESCO Recommendation on Adult Learning and Education [2015]: Para. 1).

Digital technologies are vital for education, adult education and human resource development in many organizations (Gegenfurtner et al., 2018; Thalhammer, 2014). Digital technology can be seen as a challenge for formal education, classroom autonomy, and curriculum as a means of teaching the knowledge and skills necessary for adulthood. But it can also be an opportunity, as technology can bridge the gap between formal and experiential education. (Sharples, Taylor & Vavoula, 2006). Technology has always had a significant impact on education, enabling both better communication and the application of the latest information systems useful for learning and learning

5.2 Priorities for action

The Action Plan focuses on implementation and the need to stimulate, support and scale up purposeful use of digital and innovative education practices. It will draw on a wide range of education and training stakeholders including business, research, NGOs, as well as, non-formal education where relevant. It has *three priorities:*

1: Making better use of digital technology for teaching and learning

2: Developing relevant digital competences and skills for the digital transformation

3: Improving education through better data analysis and foresight

5.3 Enhancing Digital Technologies

- Mobile technologies can play an important role in supporting adult learners; they bring a flexibility which makes learning possible from any location at any time, and can encourage learners to take more responsibility for directing and managing their own education. The ability to access learning opportunities outside the classroom can also help learners contextualize and apply their learning in the real world. The networking

and communication features offered by mobile technologies can help learners develop social skills and relationships by facilitating collaboration.

- Social media are used more and more in an educational context. They allow the user to create, contribute, communicate and collaborate online without the need for specialized programming skills; they support an open-ended learning environment and provide the learner with multiple possibilities for activities. They support interaction between mobile devices and internet, making way for increased mobile learning (or the use of "smart", mobile devices in learning).
- Social networking sites are particularly well suited to be used in education as they can support interaction, communication, and collaboration. These applications make it possible for learners, even those with modest digital competence, to actively create their own learning process rather than passively consume content. Learning can become a more participatory, life-long social process.
- In terms of pedagogy/ andragogy, the use of mobile phones – particularly smartphones – in adult learning brings a wide range of opportunities: from using mobiles to integrate aspects of informal learning, to set up episodes of situated learning, to generate learning and media contexts, to construct conversational bridges, to support learners as experts of media use in everyday life, and to set up responsive contexts for development and learning. Adult educators need to be aware of these possibilities and know how to use them to maximum effect.

In order for users to fully benefit from the digital transformation of social services, it is necessary to provide training on the steps of digitality. There may be a need for informative and awareness-raising training activities aimed at adults in order to strengthen the knowledge, skills and values base on how adults will benefit from the above-mentioned technological tools and digital social services, which processes they will follow. Users must be taught about ways to use technology must include state-ofthe-art knowledge about effective and ethical uses of technology (Goldingay & Boddy, 2017). It is especially important to address whether and when technology is an appropriate way to provide services, evidence of effectiveness, assessment and outcome measures, and ways to accommodate clients' special learning needs and cultural diversity.

6. CONCLUSIONS

Today, technological developments, access to these developments and the use of technology are an important requirement for a fair and sustainable life on the basis of human development. The use of digital technologies in social work practices is becoming increasingly common. In social services, the use of information and communication technologies is important both in the collection, classification, storage and sharing of information, and in connection with services according to the needs of the clients, reporting of data and professional decision-making processes. It was emphasized that digital technologies should be used in many stages, from the planning to the execution of social services before

the Covid-19 epidemic (Commission of the European Communities, 2006). In recent years, especially in many developed countries such as the UK, the use of digital technologies has become a priority, with the emphasis on "digitalization" in government policies, including health care and social care (Maguire et al. 2018). The effective use of technology in social services and the competencies of social workers in this regard have become even more important with the Covid-19 epidemic in order to protect the rights of the applicants and to ensure the uninterrupted continuation of the services. Because with this epidemic, “adaptation to the new normal” requires more active use of technology in many areas. In the provision of these services, it is important to develop digital capabilities of social workers on the basis of knowledge, skills and values so that they can use digital technologies in a client-oriented manner. Because it is experienced that in cases such as the Covid-19 epidemic, which is of primary importance such as the protection of health, it is not possible (or not) to carry out professional practices face-to-face. In such cases, it has been realized that the uninterrupted continuation of services for client groups is important in terms of rights-based provision of existing services. In addition, it is known that the social service needs of disadvantaged groups increase in crisis situations and even new client groups emerge. This situation increases the need for alternative service production ways to replace traditional methods. At this point, there is a need to develop new social work practice methods with digital technologies, to support professional practices through these technologies, to determine and establish technology usage standards in these practices.

7. EVALUATION

7.1 Case Studies

Examples Presented:

1.Case Scenario: One client was depressed and not interested in talking but would come in with her ipod and headphones listening to music.

Technology Solution: “2 way splitter” to allow both therapist and client to listen together to client’s music

Digital Artificial Intelligence Therapist: Ellie asked if she could listen with her client to one of her songs on her next visit.

This simple move opened the channels of communication. The song the client chose to share with her was very significant and this enabled the therapist to ask her client what the song meant to her, what were the experiences she had with it etc.

Listening to songs has remained part of the way they communicate with one another in session. Thanks to this adjustment/accommodation on her part, Yajaira succeeded in helping the client not only open up but make significant progress in her therapy. The client is no longer depressed or homeless but enrolled in a community college.

2.Case Scenario: There was a female client who wanted to be able to reach out to her mother for emotional support but was at a loss of how to do this because there was a lot of emotional baggage/history that had to be aired out between them.

To help her client move forward, Advanced Robot wanted her client to fulfill a homework assignment in which she would share her grievances in a journal but her client was unable to do so because she was not a "pen and paper" type of person.

Technology Solution: Cellphone as an audio journal recorder [via bluetooth]

Advanced robot proposed to her client to record her response using her cellphone. This idea appealed to her client but time was an issue so they came up with the plan where she would record her response en route to work using Bluetooth to ensure her safety as she was driving to work and fulfilling this assignment.

This method enabled this woman to provide 2 journal entries, These, in turn, gave them good material to work on together in subsequent sessions which ultimately led to a session with the client's mother. All this progress was possible thanks to the flexibility Advanced Robot demonstrated regarding the journal modality.

3.Case Example

New technologies provide an important way to extend independent living. Very simple digital tools can make everyday tasks much easier: people with limited mobility can use smart technologies like Hive to adjust heating remotely, or use voice-activated systems to control their lights. These tools can also support carers, enabling them to check in on relatives or patients and provide remote support, where other commitments mean they can't be physically present to help.

7.2 Elective Testing

1. Digital Social Services

a) should serve with classical methods.

b) should be governed by normative rules.

c) should be closed to changes.

d) should be revised with an innovative approach.

2. Which of the following are effects of digital transformation in social services?

1) Automation of tasks and professions

2) Digital documentation system

3) Using artificial intelligence and robotics

4) Entering the appointment queue for the service

a) 1-2 b) 1-4 c) 1-2-4 d) 1-2-3

3) List the five basic principles of Digital Social Services.

• User friendliness and inclusiveness

• Only once

• Transformation Focus Center

• 24/7

• Single entry point

• Open standards

4) What are the main problems arising from the beneficiaries in Digital Social Services?

• Trust yourself

• Horror

• Physical functionality

• Culture and communication

5) What are the main barriers to service providers in Digital Social Services?

• Data management

• Digital skills

• Funding gap

• Uneven and unequal spread of new Technologies

• Lack of social capital

6) Which of the following is not a digital technology used in learning and social services?

a) advanced robotic c) internet of things

b) artificial intelligence d) mobile service tool

7.3. Questions to the text – Teaching Materials

1. What is your opinion about the EU's regulations and strategies for digital social services?
2. What are the advantages of using technology in social services?
3. Why do we use digital social services?
4. What are the barriers to digital social services?
5. Can you share examples for the digital social services?
6. Can you share your digital social work experiences?

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