



# SKILL IT STUDY

Romania National Report  
on digital skills and youth work

This study was conducted within the framework of **Skill IT for Youth - Integrating Digital and Future Skills into Youth Work (Skill IT/Skill IT for Youth)** project.

Skill IT for Youth project (2018-2020) aims to increase the quality of youth work, combining higher levels of excellence and attractiveness in services, obtained through the digitalisation of youth work, with increased opportunities for young people. The main objective of the project is to equip youth workers with digital tools and skills to enhance young people's futures in the 21st Century.

Skill IT for Youth is co-funded by the Erasmus+ Programme of the European Union, through Ireland National Agency for the programme - Léargas.

The project is outcome of a partnership between Youth Work Ireland (Ireland), Camara Education (Ireland), Kerry Diocesan Youth Service (Ireland), Norsensus Mediaforum (Norway), Fundacja Samodzielni Robinsonowie (Poland) and Fundația Danis (Romania).

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The **Skill IT Romania National Report** was prepared by Fundația Danis team: Cristina HARUȚA, Cordelia BĂDESCU & Paula BEUDEAN.



*partner organisations:*



Co-funded by the  
Erasmus+ Programme  
of the European Union



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# EXECUTIVE SUMMARY

## Context and research objectives

The report was developed within *Skill IT for Youth – Integrating Digital and Future Skills into Youth Work* project, which aims to increase the quality of youth work, combining higher levels of excellence and attractiveness in services and programs, obtained through the digitization of youth work, with increased development opportunities for young people. The research summarized in the report aims at providing data-driven knowledge on digital youth work, youth workers, youth organizations and young people's needs regarding ICT, digital and social media, and the labor market's needs and expectations with regards to the young people's digital skills. In addition to that, the research maps the existing digital skills education programs in Romania and the role of the NGOs in development the digital skills in young people, bringing new focus onto the youth work sector, and it identifies the needs of youth workers in order to develop high quality projects for young people in the area of digital skills.

## Research methods

For the first part of the research, *Skill IT* Romanian partner, Fundația Danis, has conducted a desk research with the purpose of finding and analyzing the available researches, studies and reports that focus on the digital skills of young people, with an emphasis on what digital skills they lack, or provide frameworks/list of digital competencies that young people need for the 21<sup>st</sup> century labor market. The desk research state was helpful in evaluating the following aspects (1) the employability skills of young people, (2) the types of formal and non-formal education programs for developing young people's digital skills, (3) the youth workers' digital skills and (4) youth organizations' capacity for developing digital skills of young people.

For the second part of the research, Fundația Danis has developed four qualitative research tools which were used in conducting focus groups and interviews with different types of stakeholders/actors. To facilitate the understanding of the concept "digital skills", all research tools included a common conceptual framework (Annex 1, P21 Framework for 21st Century Learning). Two employers from Cluj-Napoca were interviewed and information about the employers' needs and expectations with regards to young people's digital skills was collected. The interviews with the employers also focused on their expectations towards youth organizations and youth workers' contribution in the area of digital skills, in the process of preparing young people for future jobs. The main purpose of the second type of interviews was to collect information about the senior managers' perspective about the digital skills needs of the youth workers

and the readiness degree to use certain ICTs in their organization/develop certain digital competencies in youth workers. Besides that, the interviews with the senior managers gathered information about the types of programs and services that are currently developed or could be developed by NGOs to increase young people's digital skills. Two focus groups with 20 youth workers were conducted to collect data about the needs of youth workers in terms of the knowledge, competencies and skills required to provide meaningful and sustainable programs and services that develop young people's digital skills, and about the needs of youth workers to grow their own digital skills and through that, the capacity to offer high quality and innovative youth services. Finally, the last two focus groups were organized with young people with the purpose of collecting information about the young people's perspective on the digital skills they need to enhance their employability.

## Main results

Concerning the employability of young people, the research findings speak of the fact that Romanian employers are looking for candidates who are flexible and adapt easily mainly because the labor market is highly dynamic and changes a lot. Young people think that employers expect of them to be resourceful, creative, to show initiative when it is needed and to be involved at the workplace. When it comes to their digital competencies, young people assess their own level of digital skills as being basic or intermediate, which fact indicates there is space for considerable improvement of these digital abilities, including by the members of the NGO sector. As expected, the ICT tools are a commonly present element in every moment and aspect of the young people's lives, as the participants admitted they use their PCs and smartphones every day, for personal and educational purposes. Our findings confirm to some extent the data collected through desk research, mainly the fact that young people in Romania rarely or never use informal education with the purpose of developing their digital skills and their opinions regarding the current and future skills required on the labor market often overlap with the opinions of the employers, but that does not imply the fact that young people have already developed the expected skills, competencies or behaviors.

Among employers, adaptability and flexibility are the main characteristics that a young person should be capable of showing at his/her workplace. As for the future skills of the young people, the general perception is that young employees will gradually withdraw from manual or operational types of jobs and will get in touch with the evolved and "intelligent" technology. Hence, future generations will have to engage more in decision-making and problem solving processes, as well as be more creative. The employers from Romania are concerned about the information literacy of the young candidates and about them being able to manage the overwhelming flows of information and to use the information in a critical and competent manner. Also, companies make efforts to improve how technology is used and try to alleviate some unintended consequences of the young people being "too digitized". The empirical data collected by conducting interviews with the employers provided more insightful data compared to the

ones revealed during desk research. One similarity is particularly noticeably, mainly that all employers tend to appreciate adaptability and flexibility in a young person.

Senior managers implied that young people will not be able to integrate on the job market unless they are equipped with the necessary digital skills. They seemed more concerned about the fact that young people lack the skills to critically and competently understand and analyze information together with the inability to fully recognize the ethical and legal implications of using ICTs, such as the issues related to privacy and over-sharing information or data.

What role can NGOs have in developing digital skills in young people? The research revealed that NGOs could intervene in teaching the professors new methods and tools for developing the right digital skills of young people and they might also contribute with ICT equipment for schools, by bringing in sponsorships from technology companies. NGOs can play the roles of mediators among families, schools and youth people and can validate or refine the skills that young people acquire elsewhere. Providing trainings for those who need improvement of digital skills (teachers, youth) looks like a contribution favored by many senior managers. The strategies of the organizations do not have a chapter or section dedicated to their digitization and it is more than obvious that most of the plans that senior managers have for their organizations will yield incremental changes in the NGOs.

Our research confirms that there are few programs and services that are intentionally developed for the purpose of enhancing digital skills among young people. Nonetheless, youth workers are aware of their role in digitizing the future generation and seem to be open to the idea of sketching and delivering in the future more programs and services aiming to develop young people's digital skills. The interviews with the senior managers of the NGOs allowed us to reiterate the idea articulated in the desk research section, according to which currently we cannot speak of a high level of NGOs' e-readiness. Most definitely, our research underpins the awareness that NGOs need assistance and help in getting on track with today's requirements regarding digitization and ICT use for the purpose of improving the overall management of the organization but also for the purpose of helping their beneficiaries, such as young people, achieve a higher level of ICT/media use and literacy.

## CHAPTER 1

### LITERATURE REVIEW

#### A. Romanian young people's present and future skills

There are few national or international studies or reports that offer a comprehensive and complete perspective about the skills that Romanian young people have or should have to access the job market. The below presented information consists of disparate data taken from a variety of sources and, to some extent, provides truncated but valuable insights about young people's labor competencies and employers' expectations in Romania.

According to a recent study conducted in 2018 on a sample of 330 companies by a Romanian career and talent recruiting company the most valuable soft skills that were sought for and appreciated by the employers were the ability of the potential candidates to communicate and to adapt (Raport HIPO.ro, 2018) (Table 1). In order to find a job, as a young Romanian, one should have had previous work experience (according to 21% of employers) and should have previously participated to internships (according to 21% of employers).

What criteria will matter the most in recruiting young candidates in 2018? (top 7 requirements)		What skills should a young candidate have in 2018? (top 7 skills)	
Previous internships	20.87%	Communications skills	16.09%
Previous work experience	20.56%	Flexibility and adaptability	15.30%
BA or MA specialization	13.60%	Results-oriented	13.23%
Extracurricular activities	11.84%	Proactivity	13.03%
Fluency in 2 foreign languages	10.07%	Ability to work in teams	8.29%
Previous involvement in youth NGOs	8.62%	Problem solving	7.60%
Academic performance	4.78%	Efficiency	7.31%

**Table 1:** Professional and skill requirements of Romanian employers

**Source:** Raport HIPO.ro, 2018

An empirical study undertaken with data from the Romanian National Research Institute for Labor and Social Protection showed some differences in the levels of employers' satisfaction towards the skills and knowledge of young candidates recruited in 2014. So, employers were mostly dissatisfied with employees with lower levels of education: 7.2% – very satisfied, 56.6% – rather satisfied, 19.7% – rather

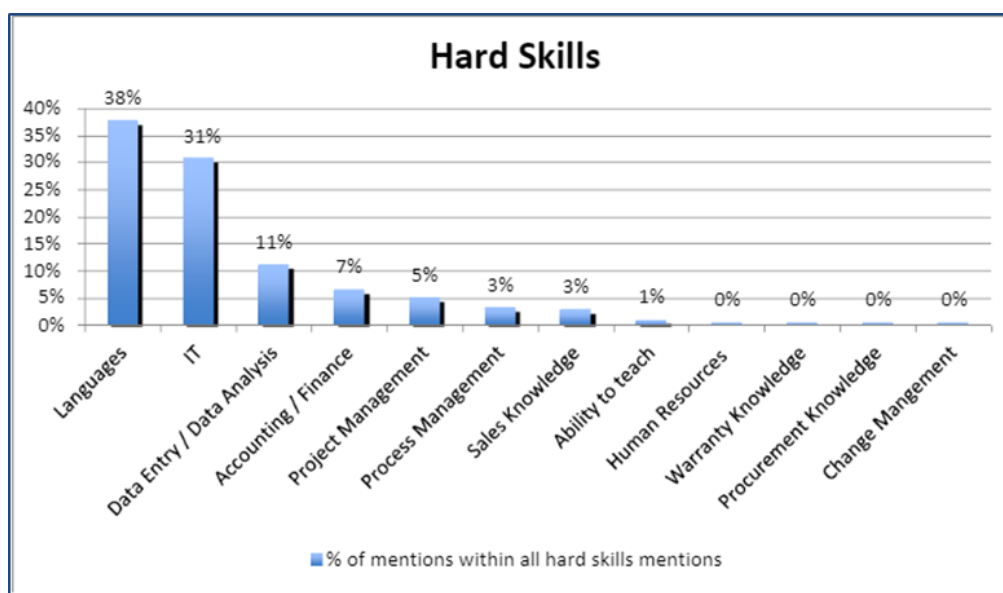
dissatisfied, 16.5% – very dissatisfied, and more content with the skills of those highly educated: 38.1% – very satisfied, 55.7% – rather satisfied, 4.5 – rather dissatisfied, 1.5% – very dissatisfied (Mocanu & Zamfir, 2016). In the same study, employers were asked to specify how important different skills of young people are when it comes to recruiting them for jobs. The assessment of five skills presented in Table 2 speaks of the fact that in order to find a job a young person should primarily have practical skills, as well as theoretical skills related to the desired job. It is worth mentioning here that ICT skills were among the aspects rated as important by the employers.

<b>How important are the following skills for recruitment?</b> (1 – very unimportant, 7 – very important)	
Character/ personality features	5.6
Theoretical skills specific to occupation	5.5
Practical skills specific to occupation	5.9
Transferable skills	5.0
ICT skills	4.3

**Table 2:** Importance of required skills

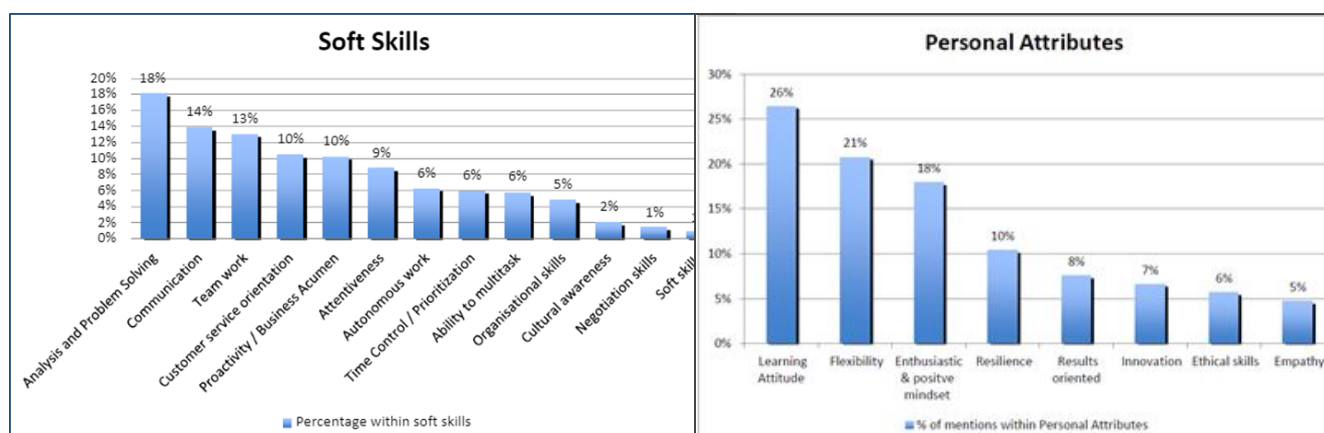
**Source:** Mocanu & Zamfir, 2016

In another academic study, authors Foerster-Pastor and Golowko (2017) analyzed the employability skills for the Romanian outsourcing industry. The data presented in this article is relevant to the topic of the report because more than 120.000 persons in 2018 in Romania were employed in this sector. Moreover, the jobs generated by the Foreign Direct Investment in Romanian usually attract a large number of young college graduates. The study itself looked at the hard and soft skills that were required on the Romanian job market in 2016 and 2017, by analyzing 91 job descriptions of 10 international players of the outsourcing industry in Romania. In total, five types of outsourcing companies were included in the research: Customer Service, IT, HR, Procurement and Accounting. The results of the research endeavor revealed that the most required hard skills by the Romanian employers are languages (38%) and IT knowledge (31%), followed by data entry and analysis skills, as well as accounting and finance skills (Figure 1).



**Figure 1:** Employers' requirements: hard skills  
**Source:** Foerster-Pastor & Golowko, 2017

The expectations of the employers differ somehow in terms of the soft skills needed by the employees. In this case, the most important abilities are analysis/problem solving ability (18%) and communication skills (14%) (Figure 2). The results of this study are aligned to the data collected in the above-mentioned reports. Personal attributes like learning attitude (26%), flexibility (21%) and a positive mindset (18%) appear to matter a lot on the labor market. To a large extent, the same soft skills and personal attributes were mentioned as being important by the interviewees that participated in our own research.



**Figure 2:** Employers' requirements: soft skills & personal attributes  
**Source:** Foerster-Pastor & Golowko, 2017

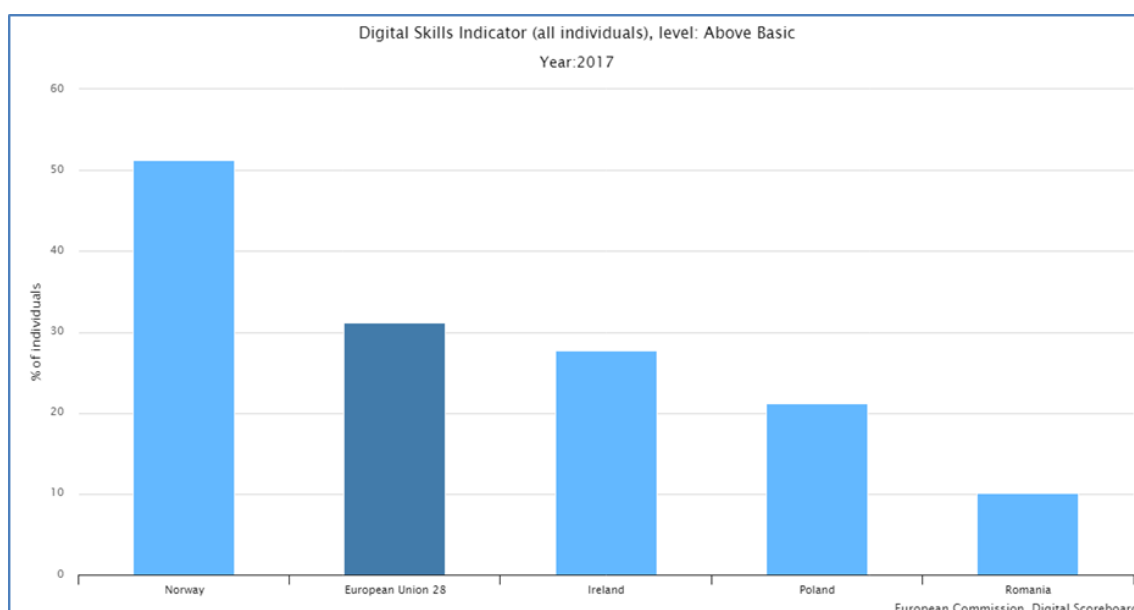
A similar methodology is used by the same authors (Foerster-Pastor & Golowko, 2018) to assess the level of digital literacy requested by the Romanian employers. Out of 91 analyzed job descriptions for 10 international companies with a subsidiary in Romania, 89 mentioned in their online job descriptions at least one of the IT skills analyzed. The IT skills currently on demand on the labor market are the following:



office applications suits – 43%, development environments – 26.9%, network protocols – 20.22%, computer programming<sup>1</sup> – 12.3%, service desk management – 8.9%, social media – 7.8%, operating systems – 5.6% and enterprise resource planning – 4.5%. The importance of IT skills differs across job categories as well. To no one's surprise, IT skills are mentioned in 86% of IT jobs, and in 80% of the sales jobs. Digital and computer skills are in high demand for jobs in customer service (77%) and for human resources (60%). The lowest percent in this list have the jobs in the Finance field (43%) and that may be mainly due to the fact that those working in finance are expected to know how to use certain application and calculation sheets that are less common in other work domains.

To analyze and present information on the digital skills of the young people in Romania, we have used the Eurostat database to compare several indicators associated to the digitization process across the countries participating in the Skill IT project. This approach provides a complete overview of the level of digital skills and of the rankings among the four countries (Romania, Ireland, Norway and Poland).

First, we compared the level of digital skills of the individuals having “above basic” skills in all four digital competency domains included in the Digital Scoreboard index calculated at EU level. The four domains include information, communication, content-creation and problem-solving (Table 3). Compared to other countries, Romania ranks last and has three times less population with above basic digital skills. In the group of individuals with basic or above basic digital skills aged 16 to 24 years, Romania has the smallest share of population of 62%, followed by Ireland with 69% and Poland with 83%. Norway is ahead of all the other states in this respect with 89% of young people with digital skills and also exceeds the European average of 81%. Data compiled in table 3 reveals that Romania considerably lags behind other countries at two domains: information and content creation.



**Figure 3:** Individuals with above basic digital skills  
**Source:** Digital Scoreboard, Eurostat, 2018

<sup>1</sup> In EU, only 19% of young people have the experience of writing a computer program. The best performers are from Finland where 38% of young people have programming skills. Lower performance is found in Czech Republic, Romania and Bulgaria with a share of 7.8% and 10% respectively (Ruseva & Rissola, 2015).

Digital Skills 16-24 years old	Basic or above basic digital skills, % individuals	Basic or above basic digital skills, % of internet users	Information	Communication	Content- creation	Problem- solving
<b>Romania</b>	<b>52%</b>	<b>58%</b>	<b>88%</b>	<b>93%</b>	<b>55%</b>	<b>94%</b>
Ireland	69%	71%	93%	97%	70%	95%
<i>EU average</i>	<i>81%</i>	<i>84%</i>	<i>94%</i>	<i>97%</i>	<i>85%</i>	<i>96%</i>
Poland	83%	85%	98%	99%	89%	96%
Norway	89%	89%	98%	99%	90%	99%

**Table 3:** Basic and above basic digital skills

**Source:** Digital Scoreboard, Eurostat, 2018

## B. Formal and non-formal education for developing young people's digital skills in Romania

Young people in Romania acquire digital skills mainly through formal education. Following the example of other European countries, for the duration of the last several years, Romania has struggled to implement viable public policies with the intention of putting the entire educational system on the track of digitization. The National Law on Education, adopted in 2011, mentions the digital competencies that students should develop through ICT classes organized during the primary and secondary education stages. The approach of the law and of the forthcoming adopted measures were unfortunately unidirectional since the intention of the policy-makers was to introduce singular ICT classes for teaching digital competencies to children instead of a transversal approach that would envision teaching ICT across different courses and classes (Tokes & Velicu, 2015). Besides that, according to the same law the government had been planning to build and use an extensive e-learning platform and a digital library. At least in theory, through different governmental programs all schools have been equipped with internet connection and computers.

According to the academic curricula, high schools students develop ICT skills in the course of the last four years of the secondary education stage (9<sup>th</sup> to 12<sup>th</sup> grades). Since 2009, the final graduation exam, Baccalaureate, contains a digital literacy examination. In 2010, the Ministry of Education started to recognize and validate the certificates that were obtained by high school students through ECDL exams (European Computer Driving License). In universities, freshman undergraduate students that are enrolled in other than STEM programs participate to a mandatory course that lasts a semester which aims at developing the digital skills of the college students. The content of the course is quite unsophisticated, because it focused mainly on how to use Microsoft Office applications and offers trainings on how to search and use online information. Universities have also been encouraged to use e-learning platforms

for educational purpose. As a result, in 2010, almost 60% of universities nationwide were using e-learning solutions (Raport privind starea învățământului superior în România, 2016).

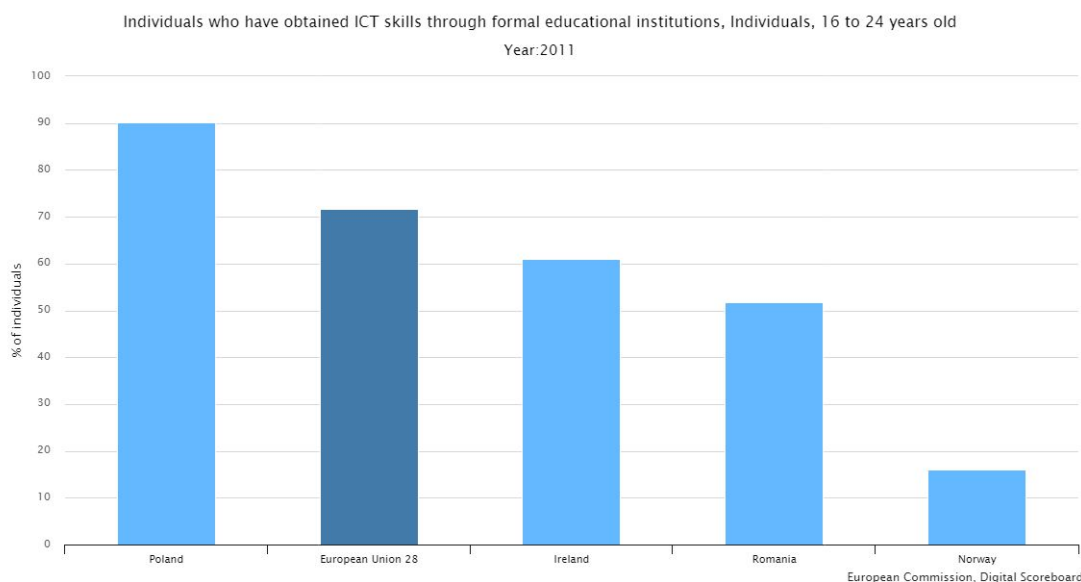
The involvement of other parties such as private companies and NGOs (Intel, Microsoft, Google, Siveco, Active Watch, “Salvați Copii”, Simplon) have contributed to the professionalization of the high schools teachers whose digital abilities have been developed through courses and trainings. In large cities, and Cluj-Napoca is among them, big IT companies recently developed their own master’s programs in IT and computer science, in their attempt to attract and train young people whom they could recruit afterwards (Mureșan, 2018).

For the purpose of the research we have taken a look at several official reports and strategies which dealt either with digitization or the state of affairs of the secondary and tertiary education in Romania. The National Strategy “Digital Agenda for Romania 2020” contains a short chapter on ICTs in education and sketches three strategic priorities or directions:

- Providing ICT infrastructure in schools;
- Developing digital competencies for students and teachers through trainings for teachers in ICT use and specific ICT training courses directly linked to improving the quality of learning and digital skills of teachers and students;
- ICT use (Open Educational Resources and Web 2.0) in the learning process and in the Life-Long Learning process, by providing an optimal framework for the use of Open Educational Resources and by digitizing and archiving the educational content.

The Ministry of Education annually issues extensive reports about the state of affairs of the secondary and tertiary education in Romania. The most recent reports were made public in 2017 and the first conclusion is that little to no reference is made in those documents to the topic of the digital competencies of youth in Romania. The improvement and modernization of IT infrastructure in universities is mentioned as a priority in one of the documents, while the other, focusing on the secondary education, reiterates the importance of developing digital and online course books for students and a platform for digital teaching materials with the purpose of improving teaching, learning and evaluation processes (Raport privind starea învățământului superior în România, 2016; Raport privind starea învățământului preuniversitar din România, 2016).

Relying on the data provided by Eurostat, in 2011, about 50% of individuals aged 16 to 24 years have obtained ICT skills through formal educational institutions. Romania is considerable below the EU average which clearly shows that more than 70% of the EU young people develop their digital skills in high schools and universities (Figure 4).



**Figure 4:** ICT skills obtained through formal educational institutions  
**Source:** Digital Scoreboard, Eurostat, 2018

Table 4 presents a comparative perspective on the different ways digital skills were acquired by youth both in Romania and in EU, on average, in 2011. Though data provided in the table are not recent, they can still be a proof to the fact that young people in Romania and in other countries either did not have the alternative to turn to other organizations, such as NGOs, for services or programs for IT skills development, or, in case such programs and services ever existed, young people did not have access to information about such possibilities of skills development. As such, only 4% of individuals have obtained IT skills through training courses and education centers on own initiative.

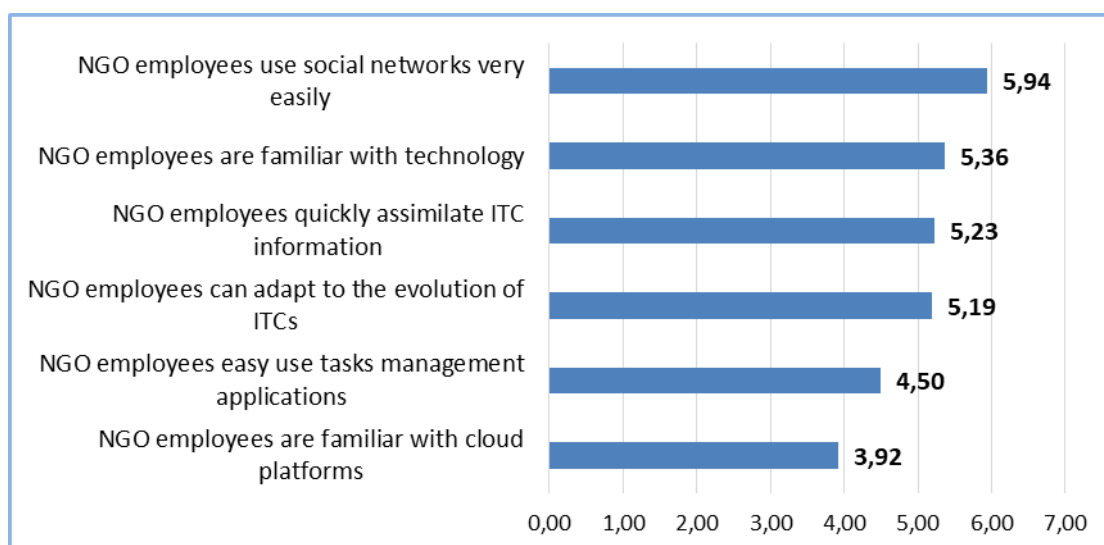
Ways of obtaining e-skills % of individuals, 16-24 years old, 2011				
	Romania	EU average	Highest ranking country	Lowest ranking country
Individuals who have obtained IT skills through formalized educational institution (school, college, university, etc.)	52%	72%	98% Lithuania	54% Italy
Individuals who have obtained IT skills through training courses and adult education centers, on own initiative	4%	6%	14% Greece	1% France
Individuals who have obtained IT skills through training courses and adult education centers, on demand of employer	2%	3%	10% Slovenia	1% Poland
Individuals who have obtained IT skills through self-study using books, CD-ROMs, etc.	24%	25%	62% Estonia	6% Greece
Individuals who have obtained IT skills through self-study (learning by doing)	50%	72%	96% Finland	38% Lithuania

**Table 4:** Ways of obtaining e-skills  
**Source:** Digital Scoreboard, Eurostat, 2018

It is worth noting that an impressive percentage of individuals in Romania are self-taught and develop their digital skills by exploring the ICT tools by themselves (50% of young people aged 16-24). Our own research underpins these results and reinforces the idea that Romanians are mostly self-educated and obtain many digital skills through “learning by doing”. Unfortunately, no studies or reports are available at this moment about the non-formal education or programs for youth’s digital skills development. Since it is highly improbable that no such programs or initiatives exist outside the formal educational system, our main explanation is that if non-formal education in Romania does take place it is limited to infrequent practices that are not highly visible or even known among those who work with young people or among young people themselves. Lack of any type of data or information could also indicate the fact that these programs and services are not well presented or are not researched for the time being. Finally, data presented in table 4 clearly shows that a small number of Romanian young (4%) people turn to non-formal education when they develop their digital skills and that could speak as well of the fact that non-formal programs and services of such type are quite scarce in Romania.

### C. Romanian youth workers’ digital skills

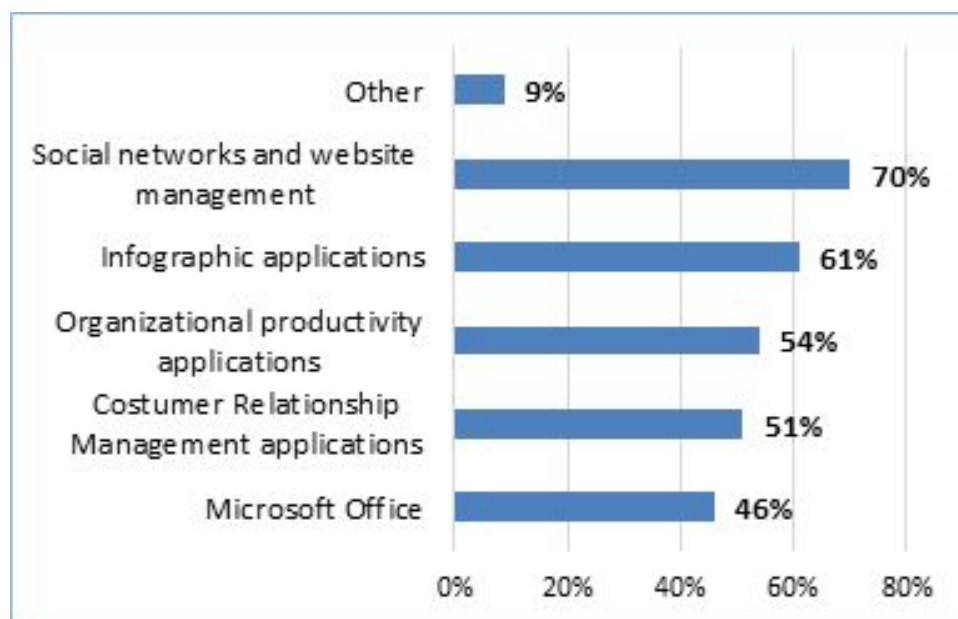
One of the few studies that contains some information about the digital skills of the NGO workers in Romania belongs to the Association TechSoup and is based on a research conducted in 2016 on a national representative sample of 302 NGOs from Romania (TechSoup and Cult Market Research, 2016). The study assesses the needs of the Romanian NGOs in terms of technology and IT services, and identifies some of the training needs of those working in the nonprofit sector. Most of the NGOs participating in the study were active in the social sector, being followed by education and youth sectors: 31% – social sector; education and youth – 29%; sports and culture – 11%; environment protection – 10%; community development – 7%; health – 6%; other sectors – 6%. More than one half of those who filled in the survey were presidents, executive directors and vice-presidents of the NGOs included in the research sample. Two questions included in the survey directly assessed the digital skills and the training needs of the NGO workers. They seem more familiar with social media and less familiar with cloud platforms, and are considered fast learners because the ability to adapt to ICT evolution scores high in the list of IT competencies (Figure 5).



**Figure 5:** Digital skills of NGO workers (1 – totally disagree, 7 – totally agree)

**Source:** TechSoup and Cult Market Research, 2016

The training needs of the NGO workers mostly refer to using and managing social media accounts and the organization's website, as well as the need of data presentation through infographics (Figure 6). Among other needs mentioned by the respondents are (9%): legal and accounting applications, project management, volunteer management, marketing, photo and video editing, cloud applications and Photoshop.



**Figure 6:** Digital skills needs of NGO workers

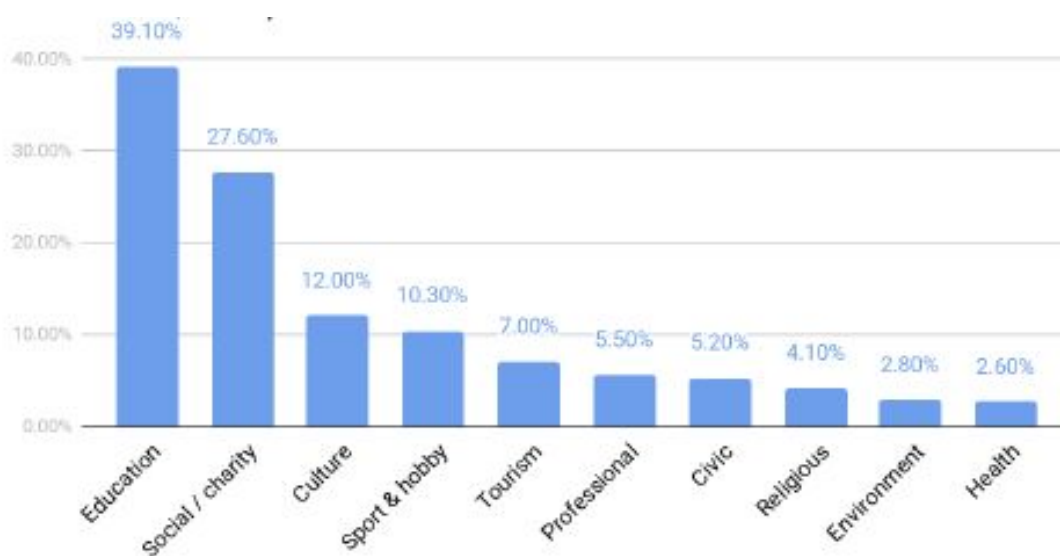
**Source:** TechSoup and Cult Market Research, 2016

The most preferred method of developing digital skills are specialized trainings (5.89 average score; 1 – totally disagree, 7 – totally agree). But in the same time, many of those participating to the study

retained the opinion that most applications and programs used in the NGOs are easy to use, and due to this fact NGO members do not need trainings to learn how to use those (4.74 average score; 1 – totally disagree, 7 – totally agree). An interesting aspect is that the predominant opinion among the respondents is that ICT trainings or those aiming to develop digital skills are expensive for the organizations (5.35 average score; 1 – totally disagree, 7 – totally agree).

## D. Romanian youth organizations' capacity for developing digital skills of young people

According to the data available in the National Register of the NGOs, in July 2018, there were almost 110,000 nonprofit organizations in Romania. According to the last national study on the Romanian nonprofit sector (FDSC, 2017), in 2015, only about 48% of the organizations from the National Register are really active – meaning they reported financial data to public authorities for the last year of activity. And out of these active organizations, 5.7% could be considered as youth organizations (organizations run by young people or working with/for young people). Thus, applying these estimates to the NGOs figures from 2018, there would be around 52,800 active NGOs in Romania, and around 3000 youth organizations. Taking into consideration the Romanian young population – around 5,000,000 people between 14 and 34 years old (FDSC, 2017), there will be one youth organization for each group of approximate 1700 young people. 91% of the youth organizations have the legal form of an association (at least three persons come together and start an organization having in common a public interest goal) (CoOp Romania National Report, 2018).



**Figure 7:** NGO organizations by types of sector  
**Source:** FDSC (2017) and CoOP Romania National Report (2018)

The main sectors of activity of the youth organizations are the followings: education (39.1%), social services/charity (27.6%), cultural services (14.8%) and sport & hobby (10.3%) (FDSC, 2017). The above figure was adapted and translated from the national study on the Romanian NGO sector (FDSC, 2017).

No relevant information could be found about the Romanian youth organizations' capacity for developing digital skills of young people, but during the desk research we came across two examples of Romanian NGOs that include in their mission and activity list the provision of IT-related education programs and services. The two NGOs will be presented in this section as examples of good practice.

The first organization is [TechSoup](#) and it is located in Bucharest. TechSoup was founded in 2010 as part of the larger network of TechSoup organizations in the whole world and it currently provides technology resources to nonprofits, as well as to youth and educators. Thanks to their innovative approach to education and the use of ICTs in the non-governmental sector, TechSoup has been awarded numerous awards and one of them is the European Digital Skills Award. The association implements an ongoing program since 2009, through which nonprofit organizations from Romania can benefit from professional software and cloud services from global tech partners and can upgrade their work. In 2015, the association has created a program for NGO employees and volunteers which can be trained annually in the first digital school exclusively created for NGOs, where they are taught by the best tech and online experts in Romania. Other programs developed by TechSoup target educators and teachers in Romania. The first one started in 2017 and is a long-term professional development program for primary school teachers in rural and small urban areas of Romania to support them to embed a layer of technology to inquiry-based learning, and the second program created the first accelerator in teaching computer science in Romania and a multi-annual program made up of computer science educators who are willing to transform public school computer science teaching. More than 2,800 Romanian NGOs have benefited from the TechSoup Romania programs, and more than 1,750 NGO employees and volunteers have been trained in digital skills, while among students there are more than 7,500 young people who have been trained in TechSoup's computer science and STEM programs along with 550 primary school teachers that were helped to understand how technology, computer science and digital skills can make education better.

[Simplon](#) is an organization located in Cluj-Napoca that mainly organizes courses and events for children with the purpose of developing their digital skills. At Simplon, children develop the necessary future skills by exploring the latest technologies, learning computer programming and how to use the computer and other digital tools through play and creative teamwork. Since 2015, Simplon has trained more than 1,500 children and has organized 75 events focused on digital and entrepreneurial education.

In our attempt to assess the digital capacity or e-readiness of the nonprofit youth sector, we turned our attention to the above-mentioned study, carried by TechSoup and Cult Market Research (2016). According to it, 71% of the NGOs plan to use more often social media to increase the visibility of the organization, while 66% intend to use applications that would help them in volunteer management and websites/social accounts management. Project management applications are of interest for 63% of organizations and data presentation applications - for about 56% of them. In 2016, about one third of the



NGOs were planning to use legal applications and one half were interested in using accounting and CRM applications. It is particularly difficult to draw an objective and valid conclusion about the e-readiness of the nonprofit sector in Romania due to lack of data about the degree of digitization of the NGOs and lack of NGOs internal practices to assess their own level of digitization.

## **E. Conclusions and highlights of the desk research and gaps identified in literature**

The main purpose of the desk research was to identify and analyze previous reports and studies on (1) the employability skills of young people, (2) the types of formal and non-formal education programs for developing young people's digital skills, (3) the youth workers' digital skills and (4) youth organizations' capacity for developing digital skills of young people. Overall, doing desk research turn out to be an uneasy task due to the fact that on most of the research topics consistent and important information is missing, scarce or mostly irrelevant because it is outdated. From this point of view, there are many gaps in the existing literature that could be addressed by all interested parties (governmental bodies, private companies and NGOs). Related to the employability of the young people, we have noticed a low interest of public institutions for bridging the gap between what employers require of young people and what the former are actually capable of achieving on the labor market. That is to say that at the present moment it is difficult to establish what makes a young person employable or what will be the assets of a young employee in five years or so. Most of the things we know about youth's employability skills come from private companies that do research for other clients from the private sector. Sadly, currently we are unable to evaluate exactly the young people's digital skills needed to prepare them for future jobs and the employers' expectations and needs related to the digital competencies of young people. In this respect, the only statistical data we could rely on are the ones collected and aggregated by Eurostat. Though data available on Eurostat can be useful in starting a conversation about youth's digital skills, it becomes less relevant when someone attempts to analyze the situation at a more granular level. Anyhow, another distressing aspect is related to the fact that few to no peer reviewed resources could be found about non-formal education for developing young people's digital skills. At this point, we can simply assume that such non-formal programs and services are either known very little or only are being developed by actors other than formal institutions, high schools and universities. Our research validated the supposition that the NGO sector in Romania has poor visibility in reports, studies and statistics referring to the digital skills of young people. The only studies that focus entirely on the Romanian nonprofit sectors do not contain references to aspect researched by us, mainly the assessment of the youth workers' digital skills and the evaluation of NGOs e-readiness. Hence, these two can also be considered major gaps in the literature.

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## CHAPTER 2

# REPORT ON FOCUS GROUPS WITH YOUNG PEOPLE

### Introduction

The main purpose of the focus groups was to collect information about the young people's perspective on the digital skills they need to enhance their employability. Following this purpose, SKILL IT Romanian partner organized two focus groups with 20 young people. The bellow report presents the results obtained through this research effort.

### 1. Profile of the focus group participants

To capture the opinions of the young people regarding their future and digital skills the Romanian partner organization has organized a couple of focus groups to which were invited college students enrolled in BA and MA programs from two of the biggest universities from Cluj-Napoca (Babeş-Bolyai University and the Technical University). The group of students was quite homogenous under the aspect of age since most of the participants were between 19 and 23 years old. However, as most of the participants were female (80%), it is worth mentioning that the opinions of the male students (20%) could have been somehow underrepresented in the research.

### 2. Perspectives on young people's present and future skills

Both meetings held with the college students debuted with several inquiries about the current and future skills that are or will be required by employers from young people who will soon enter the labor market. All participants were asked to ponder upon the knowledge, skills, competencies and attitudes a young person should have in order to get a satisfying job after finishing hers/his studies or even before graduating from college.

The most recurring answers for these questions were "fluency in at least one foreign language" and "ability to use technology at a basic level" (for instance, knowing how to retrieve and use information). Besides that, the most mentioned trait of a young person who is seeking to be employed is the person's ability to adapt to new things like a new working environment, new tasks or co-workers. The participants to the focus groups agreed that the employers are looking for candidates who are flexible and adapt easily, mainly because the labor market is highly dynamic and changes a lot. Hence, they think an

employer will more likely offer a job to a young person who proves to be adaptable, instead to a person who is highly skilled and has a lot of knowledge in a particular field, but does not know how to react to the inevitable changes in the work environment or in the economy altogether.

Other aspects that fall into the category of personal traits of young people were mentioned as well, open-mindedness, trustworthiness and seriousness are just a few of them. Young people also think that employers expect of them to be resourceful, creative, to show initiative when it is needed, and to be involved at the workplace.

A particularly interesting conclusion has to do with the fact that almost none of the participants to focus groups made a reference to some kind of specific or job-related skills. All of their observations and examples were kept in a very general spectrum of skills and competencies. To illustrate the above-mentioned idea it would be enough to indicate that the soft skills were among the most referred to in the discussion (e.g., ability to communicate and negotiate, and even to speak/write in a clear and accurate manner). Young people think that nowadays in order to get a job on the labor market it should be enough to have some innate or basic job-related skills, because most of the trainings are provided by the employers after the candidate gets admitted for a certain position.

Even though we had no initial intention to verify the current young people's understanding of the term "future skills", the interactions during the focus groups revealed that most of them are unfamiliar with this concept. Proof for that is the fact that when mentioning the future skills that will be sought after by the employers in three or five years, a large majority of participants agreed that the requirements will evolve around the requirement of knowing more than one foreign language and having more advanced digital skills. To a certain extent it is both surprising and disquieting that young people do not have the so much needed ability to anticipate how they should prepare for the labor market of the future. Even so, some of the opinions expressed by the participants did not fit in the thinking pattern of the majority:

"I don't know where I should start. Let's take for example that today I heard at an event that 90% of the future jobs haven't been created yet. In less than 10 years, people will talk about Artificial Intelligence, Machine Learning and the Internet of Things and all sorts of things that today seem to be too futuristic. But the truth is that will be our reality and the employees will be asked to use a universal language, that of computer programming, instead of a foreign language. So, this is where I do not necessarily agree with the opinions of the others. I think that what will be required from us as young employees will be more critical and computational thinking, as well as virtual collaboration." (*Focus group 1, participant 1*)

### 3. Assessment of young people's digital skills and young people's digital skills needs

Largely, the discussions during the focus groups with the students entailed sharing their opinions and insights about the types of the digital skills that they, as young job seekers, should have from the point of view of the employers. The participants were also asked to self-assess the level of their own digital skills and competencies and give examples of skills or areas in which they feel some improvement is needed, on the short and medium terms.

With very few exceptions, the most mentioned requirement was that of knowing how to use the Microsoft Office software family. Young people think that applications such as Word, Excel and PowerPoint became a "default" or a "must" of most job descriptions, regardless of the professional field or industry. Of course, whether a person has basic, intermediate or advanced skills in knowing how to use these can make a difference in the levels of employability of that particular person. Thus, young people agreed that in order to be good at a job or competitive on the labor market a candidate has to be able to showcase more and advanced digital skills. Among them is the ability to use job-specific technologies and applications, media products or communication and networking tools (SAP, SPSS, Excel, Adobe InDesign and Facebook, to mention just a few).

"I am trained to be an architect. So, it is quite obvious that my potential employer will want to assess how familiar I am with some software programs that are most common in the field. In my case the requirement will be to use AutoCAD and Photoshop, for instance." (*Focus group 2, participant 1*)

A generally shared opinion is that young people are expected to help or at least "assist" the employers with social media tools since the younger generation is considered to be more accustomed to using applications such as Facebook, LinkedIn or Instagram, for personal or professional purposes. Even so, the participants admitted that the requirement would not consist in simply knowing how to use Facebook, but in knowing how to manage a profile of a company for a marketing campaign, for creating online content or for maintaining communication with clients.

With a couple of exceptions, young people assess their own level of digital skills as being basic or intermediate, which fact indicates there is space for considerable improvement of these digital abilities. And yet, students seem to be very confident about them knowing how to, at least, access and use online information in an efficient and competent manner.

The types of digital skills that young people wish to develop vary accordingly to their personal or professional interests. Some students are quite convinced that in order to secure an attractive job offer on the labor market they have to improve their skills in data visualization and analysis. To achieve this, they plan to start learning how to use applications for statistical analysis and data presentation (SPSS, for

instance). Others have heard of more sophisticated tools such as Photoshop, InDesign and SAP that could offer them a competitive advantage and put them ahead of other young candidates looking for jobs. The interests of another category are the result of personal hobbies or passions of young people that would like to learn how to design websites or to become more proficient in using Excel or other less common tools for creating databases or calculation spreadsheets. Lastly, the last category of young people is the one that tries to foresee the future and intends to learn computer-programming.

Turning back to the framework which was used throughout the entire research with all groups of participants to assess the digital skills of young people and youth workers, after interpreting the data collected through focus groups with young people, it becomes quite clear that the young people tend to focus more on the use of ICTs and less on media and ICT literacy. Young people's opinions and perceptions about their current and future digital skills fall predominantly in the last category (ICT Literacy) of the P21 framework (Annex 1).

## 4. Digital skills development and ICT use among youth

How do young people usually learn a new digital skill and on whose help do they rely when trying to learn a new digital skill? This important question derived from the above researched topics and necessitated an insight from the focus group participants in order to establish whether the NGO sector has or might have a role in developing digital skills in youth, among many other things.

The interaction with the young people during the focus group discussions revealed two somehow opposite methods of learning a new skill that are preferred by them. Whenever they are exposed to a new digital device, tool or application, some young people choose to get familiar with it by exploring its options and functionalities by themselves. The entire process of learning how to use a new application or a new device poses challenges that can be addressed either through online tutorials which are available on YouTube or by asking a person who already acquired that particular digital skill. In this sense, it could be said that young people are autodidacts and usually opt for a "learning by doing" process during which they develop digital skills. The other category consists of students that prefer to turn to a tutor's or instructor's advice. Though it was unclear if this category prefers formal or non-formal programs and services, it became apparent that some young people would rather choose face-to-face trainings and interactions, during which questions can be raised and answers can be provided by a "living human being" (*Focus group 2, participant 5*).

The fact that some of these services could be provided by NGOs or other public or private parties have not been mentioned by the participants. Therefore, young people do not appear to be aware of the fact that the nonprofit sector can be a provider of programs and services through which they could be assisted to learn new digital skills.

ICT tools are a commonly present element in every moment and aspect of the young people's lives. The participants admitted they use their PCs and smartphones every day, for personal and

educational purposes. The tools and applications most widely used are the ones that allow them to communicate and network/socialize (Facebook, Twitter, WhatsApp, Skype, Gmail), to entertain and relax (Instagram, Snapchat, YouTube, SoundCloud, Spotify), to access information (Google Maps, news applications), to manage their personal lives (Google Calendar, applications for notes and reminders, Internet banking), and to acquire knowledge and learn new skills (applications for translations and foreign languages, dictionaries).

When the participants to the research were asked to reflect on the advantages and the limits of using ICTs, most of them mentioned that the main plus of today's rapid evolutions in digital technology is the ease of communication and extremely accessible information. The obvious downside of relying too much on ICTs is that of human estrangement that affects especially young people and distorts their communication practices. In addition to that, the participants to the focus groups admitted that technology makes them easily distracted and considerably reduces their attention span.

## **5. Young people's previous experience with the NGO sector in regards to youth workers' digital skills**

More than 2/3 of the participants to the focus groups have rarely interacted with the representatives of the NGO sector from Cluj-Napoca or Romania, overall. For this reason, they were unable to assess and to offer insights regarding the digital skills of the youth workers. However, those who previously volunteered or were members in nonprofit organizations have evoked exclusively positive memories and impressions about their experiences with NGOs. As such, some of the young people even mentioned that there is nothing that could be imputed to the youth workers in terms of their lack of digital skills. And, as mentioned earlier, young people are not at all aware of the fact that youth workers can be providers of programs and services through which they could be assisted to learn new digital skills. Surprisingly enough, several participants even suggested that the main role in developing digital skills among children and youth should be assigned to institutions responsible of primary and tertiary education programs and not to NGOs, which already have taken over too many social roles and responsibilities, in their attempt to correct and attenuate the social and economic injustices and inequalities from Romania.

## **6. Conclusions and other relevant insights**

The participants to the focus groups agreed that the employers are looking for candidates who are flexible and adapt easily mainly because the labor market is highly dynamic and changes a lot. Young people also think that employers expect of them to be resourceful, creative, to show initiative when it is needed, and to be involved at the workplace. When it comes to their digital competencies, young people



assess their own level of digital skills as being basic or intermediate, which fact indicates there is space for considerable improvement of these digital abilities, including by the members of the NGO sector. As expected, the ICT tools are a commonly present element in every moment and aspect of the young people's lives as the participants admitted they use their PCs and smartphones every day, for personal and educational purposes.

The data collected through the two focus groups conducted with the young people will help the Skill IT partner organizations that are responsible for coordinating other educational resources of the project to contextualize and adapt the outputs that will be created to fit the expectations and needs of the young people from each partner country. The insights provided by the young people through the face-to-face interactions with them will help in addressing the digital challenges that they are facing at the present moment in a timely and realistic manner. Some of our findings confirm to some extent the data collected through desk research, mainly the fact that young people in Romania rarely or never use informal education with the purpose of developing their digital skills, and their opinions regarding to the current and future skills required on the labor market often overlap with the opinion of the employers. But that does not imply the fact that young people have already developed the expected skills, competencies or behaviors.

## CHAPTER 3

# REPORT ON INTERVIEWS WITH EMPLOYERS

### Introduction

The main purpose of the interviews was to collect information about the employers' needs and expectations with regards to young people's digital skills. The interviews also focused on the expectations of the employers towards youth organizations and youth workers' contribution in the area of digital skills, in the process of preparing young people for future jobs. Following this purpose, SKILL IT Romanian partner interviewed two employers from Romania. The below report presents the results obtained through this research effort.

### 1. Profile of the interviewees

In any debate or discussion about the labor market, the voices of all actors and parties involved should be heard. Employers have always had a say about their needs and expectations regarding the quality of the human resource they are looking for in order to run their businesses. In this chapter the inputs of two Romanian employers will be presented, with a special focus on the perspectives they have on young people's digital skills.

The interviewees are both representatives of multinational corporations and currently are heads of HR departments of their companies. The types of two businesses differ considerably in terms of the industry (IT services and retailing) and also in terms of the number of employees. So, the IT company has more than 1600 of employees and annually hires about 200 young people, while the retailing company has more than 2700 of employees and offers approximately 900 of jobs per year.

### 2. Perspectives on young people's present and future skills

Adaptability and flexibility surfaced as the two main characteristics that a young person should be capable of showing at his/her workplace, besides the job-specific skills that every candidate should have when applying for a job. The interviewees admitted that whenever they are recruiting new personal for their companies they are interesting in young people who seem reliable, have initiative and appreciate the value of teamwork.

“It is important to follow the rules of the company, but when an employee disagrees with what is happening in the company and has ideas that could trigger positive changes, it is worth to question the existing rules of the company for the sake of the improvement”. (*Interviewee 2*)

Young people are also expected to maintain interest in their job-related tasks and activities and to be oriented towards a continuous learning and development process. As for the future skills of the young people, it could be said that the employers easily associated or connected those skills to the inevitable evolution of the information and communication technology. The general perception is that young employees will gradually withdraw from manual or operational types of jobs and will get in touch with the evolved and “intelligent” technology on a permanent basis (computers, robots, machines, etc.). Hence, future generations will have to engage more in decision-making and problem solving processes, as well as be more creative.

### 3. Perspective on young people’s digital skills: expectations and required competencies

The employers do not doubt the point that young people or the generation called “the millennials” know how to use ICT tools and they are familiar with technology and digital content. From this point of view, they say that older expectations, such as knowing how to use a computer, are no longer valid for today’s reality and for the businesses. Hence, they are more concerned about the information literacy of the young candidates, and about them being able to manage the overwhelming flows of information and to use the information in a critical and competent manner.

“I think that in the near future both employers and the employees will be more careful with data and information they hold. I sometimes witness these days how our young employees tend to unintentionally disclose valuable information, such as a code line to the colleagues just by talking on the halls of the company. [...] I don’t think they completely understand that this could have negative implications for our clients”. (*Interviewee 1*)

The interviewees have a certain degree of awareness around the fact that young people know how to use technology and digital applications as tools in their personal lives. What they require from young candidates and employees is to learn how to use these tools “with a purpose” (*Interviewee 1*), in their professional fields as well. So, young people are expected to go beyond the all-known functionalities of an application, and try to use it for the improvement of work-related processes, tasks and activities, with the ultimate goal of contributing to the development of the company that has them as employees. More specifically, while those aiming for managerial positions are expected to have advanced digital skills depending on the job description, no particular digital competencies are required from young employees accessing entry-level positions.

## 4. Digital skills gaps among young employees/candidates and companies' ways of addressing them

The employers could not identify any particular digital skills gap among young employees and candidates. On the contrary, it appears that young people are well trained in using ICTs tools. When certain tasks or activities demand a digital skill from the employee, the trainings are provided on-site, by the companies, and are not long in duration.

Companies sometimes make efforts to improve how technology is used and try to alleviate some unintended consequences of being "too digitized". In this case, again, the interviewees insisted on the fact that they often are put in the position to explain to the young employees how information should be used and what type of "online" behavior is expected from them. A recurring aspect is related to issues concerning online data protection and the tendency of the young people to share information that is confidential and sensitive. Lately, this issue has been addressed by official company procedures, and some of them being imposed by international bodies, such as the European Union.

## 5. Obstacles impeding digital skills development and limits to using ICTs by young people

Several factors are to be blamed for impeding digital skills development in youth in the Romanian context. Among them are the failures of the formal education system to keep up with the demands of the labor market and the quality standards or models that can be observed in so many Western countries. References to history and poverty have also been mentioned by the employers. Many times Romania finds itself in a disadvantageous situation compared to other EU or affluent countries, due the major delays in economic and social progress and reforms.

Arguably, the advantages to using ICTs by young people are numerous and have been easily identified during the interviews. Facilitated communication and ease of accessing information were brought up as the main strengths of using ICTs. In terms of disadvantages, employers are worried about today's youth not having enough emotional intelligence, and lacking the capacity to dissociate themselves from their "online" lives, which fact can impact their mental health and can negatively influence their interactions with other members of society.

## 6. Standpoints on stakeholders involved in developing digital skills in youth

According to the opinions expressed during the interviews, Romanian young people mainly develop digital skills in informal contexts, such as the family. Children and young people get in contact

with the technology at their parents initiative and with their consent and, at least during the first years of their lives, they get familiar with technology and the digital world by exploring those by themselves. However, this reality does not fit into the “ideal model” envisioned by the employees. They admitted that the involvement of formal institutions responsible for education is desired in all stages of a child’s development and that schools and universities should be the most important and reliable providers of youth’s digital skills.

“In my opinion, today, the Romanian schools do not provide a learning context in which students are trained in a continuous and consistent manner. And that is unfortunate, because students should benefit from an education that is more oriented towards what is happening on the labor market”. (*Interviewee 2*)

A significant role is assigned to NGOs as well. These are regarded as facilitators and even auditors of the quality and content of the programs and services offered by other actors. Seemingly, NGOs can contribute a great deal to the development of young people’s digital skills by monitoring what are the demands of the companies, on the labor market, and gaps from the formal or informal training/education of the youth.

## 7. Conclusions and other relevant insights

Adaptability and flexibility are main characteristics that a young person should be capable of showing at his/her workplace. As for the future skills of the young people, the general perception is that young employees will gradually withdraw from manual or operational types of jobs and will get in touch with the evolved and “intelligent” technology. Hence, future generations will have to engage more in decision-making and problem solving processes, as well as be more creative. The employers are concerned about the information literacy of the young candidates and about them being able to manage the overwhelming flows of information and to use the information in a critical and competent manner. Also, companies make efforts to improve how technology is used and try to alleviate some unintended consequences of the young people being “too digitized”. The data collected for this part of the research will provide support in developing other SKILL IT educational resources, mainly the ones that also touch on the dimension of youth’s employability. The empirical data collected by conducting interviews with the employers provided more insightful data compared to the ones revealed during desk research. One similarity is particularly noticeably, mainly that all employers tend to appreciate adaptability and flexibility in a young person.

## CHAPTER 4

# REPORT ON FOCUS GROUPS WITH YOUTH WORKERS

### Introduction

The main purpose of the focus groups was to collect information about the needs of youth workers in terms of the knowledge, competencies and skills required to provide meaningful and sustainable programs and services that develop young people's digital skills. We also aimed to collect information about the needs of youth workers to grow their own digital skills and through that, the capacity to offer high quality and innovative youth services. Following this purpose, SKILL IT Romanian partner organized two focus groups with 20 youth workers from two youth organizations. The bellow report presents the results obtained through this research effort.

### 1. Profile of the focus group participants

The focus groups were organized with members of two NGOs, one working closely with youth from Cluj-Napoca as well as from its neighboring communities, and the other one working at national level. One of the organization offers programs and services that help young people, aged between 14 to 20 years, to finish their studies and get oriented around personal and professional life goals. Annually, the NGO helps more than 300 children and young people and since 2007 is succeeded in providing services to more than 2000 clients. The second organization, working at national level, focuses on the empowerment of young people, to develop themselves and their communities, through innovative and non-traditional methods of learning and development. In 2017, it has developed programs for more than 250 schools in Romania and have counselled and assisted more than 1,000 teachers and 100 school principals. Nonetheless, the most impressive achievement in 2017 were the 25,000 children and young people who benefited from their programs and services. The participating organizations are well appreciated by the local communities and members of the NGO sector for their achievements and dedication to improve the lives of young people. All participants to the focus group have at least one year of experience in working with young people and are familiar with the environment of the nonprofit environment, which make their opinions about the researched topics all the more valuable.

## 2. Perspectives on young people's present and future skills

The participants to the research willingly shared their opinions about the young people's present and future skills that are expected from employers and increase their employability on the job market. Youth workers preferred to mention mostly attitudes and skills, rather than types of knowledge and, just like the other categories of participants, in this group, adaptability and flexibility were mentioned more than just a couple of times.

Other predominant traits of future young employees are the ability to work in teams and to be proactive, creative and persevering. Youth workers insisted on the fact that employers expect from the young candidates to be curious about their job or the company while remaining focused on a continuous learning process during their careers. Qualities such as empathy and critical thinking were also mentioned by those who consider this requirement less acknowledged even by the employers themselves.

As for the future skills of the youth, a widely spread perception is that the next generation will have to easily adapt to a work environment in which advanced and innovative technology will be largely present and used. In their attempt to retain the young human resource, a general expectation from the employers will surface around the engagement and commitment of young employees to a particular workplace or task/project/idea. An interesting point of view was expressed by a participant who suggested that nowadays young people tend to be rule benders and this reality will demand a change in attitude from the job givers as well:

"The employers themselves will have to adapt and adjust their expectations to the new generation who is constantly seeking for a purpose or a meaning in everything that they do".  
(Focus group 1, participant 10)

## 3. Assessment of young people's digital skills

Youth workers were able to provide a very detailed and interesting assessment of young people's digital skills. Their experiences in working with youth of all ages allowed them to touch upon some important aspects related to what young people are capable of doing and not doing in terms information and ICT literacy.

A widely shared opinion is that young people in Romania and elsewhere get familiar with the information and communication tools at early stages in their lives and, for this particular reason, they are being called "digital natives". The fact that they are more familiar with technology than other generations makes them "fast learners" (Focus group 1, participant 3), but this does not necessarily reflects positively on the way they acquire knowledge and develop their life skills or professional competencies. For instance, they can easily have access to information and know how to retrieve it, but what they seem to be lacking is the ability to critically assess the validity and the trueness of the information sources and of its content.

To this point, some of the youth workers have not hesitated to call today's young people "superficial" when it comes to using technology and digital tools. Their biggest concern is that employers looking for young and qualified human resource usually encounter the same problem when interacting with young people, who prove that they can use ICTs mostly for personal use, but struggle with using ICTs for professional purposes. In addition and related to that, some participants agreed that the major differences in how different categories assess the level of youth' digital skills (families, educators, employers, young people themselves) stem from the inability of the young people to assess their own digital competencies:

"Numerous times, I have met children that told me that they can use the most commonly known Microsoft Office tools. At the beginning, I never dared to doubt that was true, until I discovered that large groups of students were incapable of following basic instructions about how to write in a Word file. Then, I realized that they cannot assess what they know and what they do not know, and what is the desired level of competency. They clearly lack guidance from educators, professors and families regarding how technology can be used to its fullest potential". *(Focus group 2, participant 5)*

Youth workers illustrated their opinions by giving some examples of cases in which the young people they worked with have proved to have a low level of digital skills or none at all. Most of the complains are related to the fact that the beneficiaries of the two organizations are unskilled users of e-mail, Word, PowerPoint or Excel; other youth workers fear that by not learning how to behave appropriately in an online environment, young people can cause harm to others and to themselves (as a reference to cyberbullying and online harassment).

When youth workers were asked to try to identify some explanations for the upsetting situation depicted by them, they admitted that in the Romanian context there are several factors that contribute to the low digitization among youth. The participants unanimously agreed that large number of children and young people do not have access to technology infrastructure, especially in rural areas. When young people do not own their computers they usually have access to old school infrastructure with outdated software. Some of the youth workers blamed the central and deconcentrated local institutions for their lack of initiative and policies/programs aimed at adjusting the content of the curricula taught in Romanian schools and at providing training services for educators and teachers that would be in charge of developing digital skills of the children and young people.

## 4. NGOs' and youth workers' role in developing digital skills in young people

For this dimension of the research the focus groups participants were asked to reflect about the role of the NGO sector in developing digital skills in young people as well as about the possible ways NGOs



can help to address the gaps in the digital skills, knowledge and competencies of the youth. Related to this topic, an interesting perspective surfaced during the discussions. Youth workers think that to some extent almost all NGOs contribute to the digital skills development of their clients, especially if those organizations work with children and young people, because every aspect of their work is somehow related to the information and communication technologies. However, another interesting opinion referred to the idea that the NGO sector should not be held accountable or responsible for the digitization of the future generations, unless this kind of endeavor is specifically included in the mission of an organization (for instance, an organization that aims at increasing the online literacy of different categories of persons). In other words, the youth workers feel that they should contribute to the development of digital skills in young people in a very natural and “organic” manner by carrying on with what they usually do in their organization. The general perception is that NGOs can play a role in this domain by offering expertise to other actors, by mediating the desired outcomes and measures meant to achieve those outcomes, by facilitating the learning processes, and by transferring knowledge and abilities to other parties or beneficiaries. The following quote appears to be particularly relevant for the indirect and implicit role that youth workers envision for themselves:

“In my opinion, in this case, just like in many other cases, the non-governmental organizations should play the role of a *helping hand* that provides assistance if it is needed. If we develop a program or think of an activity that has to do 100% with digitization of young people, it should be the result of our will and that of the organization’s strategy. It should not be an activity dictated by the state’s/government’s failure to teach kids in schools how to use technology and how to equip them for the job market and life, in general”. (*Focus group 2, participant 8*).

All programs and services provided by the two NGOs entail at least some activities that directly and indirectly develop the digital skills of the young people. In this case, examples ranged from situations in which their beneficiaries were taught how to write an email or how to do a PowerPoint presentation, how to use an application to edit videos or photos, or how to use a website to create a CV, etc. To some extent, the needs, as well as the constraints that originate from the inevitable progress of the digital and technological world tailor the programs and services of the NGOs and dictate a rhythm to which youth workers are making efforts to adapt in a timely and efficient manner.

Youth workers were quite confident when evaluating their own digital skills. The short self-assessment puts them among the intermediate or upper-intermediate users of technology and ICT tools. To a certain extent it could be said that, contrary to the obvious lack of skills of some persons, they did not appear as worried about the unsatisfactory level of digital literacy, on the contrary, they seemed auto-sufficient. But when it happens to the youth workers to acknowledge that they lack a skill, how do they deal with their own gaps in digital skills? Self-teaching and asking for advice from colleagues are the methods of acquiring skills preferred by the youth workers. While they self-assess their digital skills as satisfactory and reaching an upper-intermediate level, youth workers admit that usually a new skill is learned if it is led and preceded by a personal or professional need:

“I am a curious person and I think that am quite technologically-savvy. I recently learned how to use Canva, Google Drive and I have learned some tips and trick from friends on how to not over-share things on social media. We are all capable of learning new things, but since our time and resources are limited, our learning process is clearly needs-oriented”. (Focus group 1, participant 2)

## 5. Standpoints on programs and services aiming to develop young people’s digital skills

Youth workers are aware of their role in digitizing the future generation and seem to be open to the idea of sketching and delivering in the future more programs and services aiming to develop young people’s digital skills. They admit that any idea coming from the management, the employees or the even young people can be put into practice, if the necessary resources will be allocated into making those plans a reality. However, these potential plans come hand in hand with several reasonable requirements on the behalf of the youth workers as members of their organizations. They admitted that before they focus more on educating young people, they feel the organization should provide them more trainings and, last but not least important, the management of the organizations should align their own visions to the modern, digitized world by bringing in the organizations more digitized management processes and new technology.

## 6. Conclusions and other relevant insights

Youth workers preferred to mention mostly attitudes and skills, rather than types of knowledge, and adaptability and flexibility were mentioned more than just a couple of times. A widely spread perception about the future skills of the young people is that the next generation will have to easily adapt to a work environment in which advanced and innovative technology will be largely present and used. In their attempt to retain the young human resource, a general expectation from the employers will appear around the engagement and commitment of young employees to a particular workplace. The biggest concern expressed by the participants is that employers looking for young and qualified human resource usually encounter the same problem when interacting with young people who prove that they can use ICTs mostly for personal use, but struggle with using ICTs for professional purposes. Youth workers are aware of their role in digitizing the future generation, and seem to be open to the idea of sketching and delivering in the future more programs and services aiming to develop young people’s digital skills.

The data collected for this part of the research will provide support in developing other intellectual outputs, mainly the ones that also touch on the dimension of youth’s digital skills development, especially on the specific types of program and services that NGOs could provide to youth. The scarce data that we

managed to collect through desk research is similar to the ones collected by conducting interviews with youth workers. In this sense, our research confirms that there are few programs and services that are intentionally developed for the purpose of enhancing digital skills among young people.

## CHAPTER 5

# REPORT ON INTERVIEWS WITH SENIOR MANAGERS OF YOUTH SERVICES

### Introduction

The main purpose of the interviews was to collect information about the senior managers' perspective about the digital skills needs of the youth workers and the readiness degree to use certain ICTs in their organization/develop certain digital competencies in youth workers. Besides that, the interviews collected information about the types of programs and services that are currently developed or could be developed by NGOs to increase young people's digital skills. Following this purpose, SKILL IT Romanian partner interviewed eight senior managers from youth organizations. The bellow report presents the results obtained through this research effort.

### 1. Profile of the interview participants

For this part of the research the Romanian partner conducted face-to-face individual or group interviews with representatives of seven NGOs working with children and/or youth. All participants were at the moment of the interviews leaders of their organizations (executive directors or vice-presidents) and two of the participants were members of the same organization.

Since the Romanian partner organization is located in a city that attracts large numbers of students that study in its universities, it seemed only sound to ask the opinions of the organizations representing students. For this reason, almost half of the interviewees were leaders of students' organizations from Cluj-Napoca. All NGOs except one are to be found in Cluj-Napoca and have been part of the Romanian non-governmental sector for at least 3 years.

### 2. Perspectives on young people's present and future skills

According to the opinions expressed during the interviews, the many demands and expectations of the employers from today's youth evolve around a vast array of soft skills that young people should have or should develop in order to get on the job market and to excel in what they are doing once they accept a job opportunity. Such soft skills are good communication, ability to work in teams, punctuality and honesty, active listening and empathy, to name just a few.

Similarly to all the other categories of participants that took part in the research, senior managers also retain their opinion about the importance of adaptability at the workplace. They also think that in view of the forthcoming inevitable changes on the labor market, which will be induced by the technological progress, young people should be capable of showing more creativity and initiative and should have strong insights about their role as members of a company and of a community.

In the future, the employees will be required to be as familiar as possible with the technology and the digital tools that will gradually pervade all types of industries and economic activities. To put it differently, senior managers implied that young people will not be able to integrate on the job market unless they are equipped with the necessary digital skills.

### 3. Assessment of young people's digital skills

In the opinion of the senior managers of the NGOs, young people in Romania do not entirely lack digital skills. On the contrary, they managed to observe during their activities that most children and youth are tech-savvy and can use technology and the digital tools. What puts Romania among the last positioned countries in the rankings evaluating digital skills worldwide is the inability of young people to apply the basic knowledge in their professional lives, as well as the lack of personal ambition or of the contexts in which digital skills could be improved for the purpose of reaching a more advanced level of ICT literacy. So, with regards to the digital requirements of the employers, the general impression is that most young people can succeed and accomplish them, because they know how to use a PC and are familiar with the usual Microsoft Office applications. Nonetheless, senior managers seemed more concerned about the fact that young people lack the skills to critically and competently understand and analyze information, together with the inability to fully recognize the ethical and legal implications of using ICTs, such as the issues related to privacy and over-sharing information or data.

Governmental bodies are mostly responsible for the situation we are in. The Ministry of Education fails in formulating and applying viable strategies and policies with a focus on developing digital skills among children and young people. Interviewees think that the actors in charge of young's people education, namely the teachers, are not well trained themselves and many times are considered to be incompetent. Lack of proper access to ICTs, especially in rural areas, and outdated software or hardware have been mentioned among the factors that decrease the chances of Romanian young people to develop digital skills.

"In regards to digital skills, the outdated approach provided by the educational system, together with the prevalent and everlasting gaps between poor rural vs. privileged urban, creates a setting in which digital skills are part of a vaster map of imbalances in the Romanian current reality". (Interviewee 7)

Senior managers see more advantages than disadvantages in using ICTs by youth. While the advantages provided by the technology and digital tools are quite obvious (facilitated communication and easy access to information), the disadvantages are more thought-provoking. Some interviewees were concerned about the obvious changes in communication patterns of the young people, and others expressed their worries about inappropriate online behavior that could lead to issues such as addiction to gambling or gaming, cyberbullying, child pornography, etc.

#### **4. NGOs' role in developing youth's digital skills and standpoints on programs and services aiming to develop young people's digital skills**

All interviewees agreed that the non-governmental sector has a role in developing youth's digital skills. They also emphasized that NGOs can be part of the solution for the problem, but they should not be regarded as the only entities who could or, worse, should "fix" the issue of the Romanian un-digitized youth. Hence, as participating "fixers", NGOs could intervene in teaching the professors new methods and tools for developing the right digital skills of young people, and they might also contribute with ICT equipment for schools, by bringing in sponsorships from technology companies. NGOs can play the roles of mediators among families, schools and youth people, and can validate or refine the skills that young people acquire elsewhere. Providing trainings for those who need improvement of digital skills (teachers, youth) looks like a contribution favored by many senior managers.

"Reaching directly high school students who are about to enter the working-force, especially in rural settings, is certainly necessary. Knowing how to apply for a job, how to prepare a CV, how to use social media, how to avoid fake sources of information are keys not only to a prosperous society, but also to a stable democracy". (*Interviewee 8*)

All programs and services provided by the NGOs include a digital dimension, either directly or indirectly. The projects that were developed to improve a certain skill usually consist in activities that entail learning how to use Office applications, how to create a CV using online tools, how to write business emails or how to design websites.

One senior manager told us that her organization supports, indirectly, the development of young people's digital skills through the Erasmus for Young Entrepreneurs program, in which the young entrepreneurs develop skills on online self-presentations, online applications and communication, etc. At the same time, in an Erasmus+ initiative for adult education, the participants learn how to use Moodle for online learning, but also, directly, the initiative includes a module on Internet security. Students' associations provide training in personal branding, online marketing, social media and content creation, time management, etc.

"I think every project of our organization implied using some digital component. For instance, when we organized the event call Academy, I remember we did Skype interviews, then

the applications were submitted online, when the participants arrived in Cluj-Napoca, we suggested them to download and install certain applications that helped them get around the city. And then, during the event we used different equipment and had to create PowerPoint presentations". (Interviewee 3)

## 5. Assessment of youth workers' digital skills and NGOs' digital competencies needs

Most members of the NGOs have basic digital skills that allow them to accomplish their tasks at work: "If you ask me, I would give my colleagues a 7 out of 10 for how well handle technology" (Interviewee 5). Only some senior managers, those representing students' associations more exactly, told us that the members of their organizations are proficient in using technology and digital tools. That assertion should not be dismissed immediately, because most students' associations work with young people who probably have more chances than other categories of youth workers to have advanced digital skills.

Whenever a need is identified, gaps in the knowledge of youth workers are usually addressed through trainings provided by the members of the same organization or by some expert guests. Senior managers mentioned that recently trainings have been organized for the following: PowerPoint, Photoshop and other Adobe products, calculation sheets and applications, Google Drive, Canva, Boot-Camp, Gmail etc. It is worth mentioning that the need along with the initiative for "digitization" usually belong to one of the managers or to some tech-savvy colleague and these people sometimes find themselves in the position to "sell" the idea to their colleagues from whom they once in while encounter some resistance to change or recalcitrance.

## 6. NGOs' digital readiness

All participants acknowledge the importance of the ICT tools and have plans of expanding using different tools for the development of the organization. The strategies of the organizations do not have a chapter or section dedicated to their digitization and it is more than obvious that most of the plans that senior managers have for their organizations will yield incremental changes in the "lives" of their NGOs. They are mostly focused on acquiring new technology and replacing the old one, and gradually introducing new digital tools for organization management (for instance, communication and promotion, donors' management).

## 7. Conclusions and other relevant insights

Senior managers implied that young people will not be able to integrate on the job market unless they are equipped with the necessary digital skills. They seemed more concerned about the fact that young people lack the skills to critically and competently understand and analyze information, together with the inability to fully recognize the ethical and legal implications of using ICTs, such as the issues related to privacy and over-sharing information or data.

NGOs could intervene in teaching the professors new methods and tools for developing the right digital skills of young people and they might also contribute with ICT equipment for schools, by bringing in sponsorships from technology companies. NGOs can play the roles of mediators among families, schools and youth people, and can validate or refine the skills that young people acquire elsewhere. Providing trainings for those who need improvement of digital skills (teachers, youth) looks like a contribution favored by many senior managers.

Gaps in the knowledge of youth workers are usually addressed through trainings provided by the members of the same organization or by some expert guests. The strategies of the organizations do not have a chapter or section dedicated to their digitization and it is more than obvious that most of the plans that senior managers have for their organizations will yield incremental changes in the NGOs.

The data collected for this part of the research will provide support in developing other Skill IT educational resources, mainly the ones that also touch on the dimension of digital skills needs of the youth workers and the readiness degree to use certain ICTs in their organization/develop certain digital competencies in youth workers. The interviews with the senior managers of the NGOs allow us to reiterate the idea articulated in the first part of the report (desk research), according to which currently we cannot speak of a high level of NGOs' e-readiness. Most definitely, our research complements the scarce information provided by the desk research and underpins the awareness that NGOs need assistance and help in getting on track with today's requirements regarding digitization and ICT use for the purpose of improving the overall management of the organization but also for the purpose of helping their clients, such as young people, achieve a higher level of ICT/media use and literacy.



## APPENDIX 1 - INFORMATION, MEDIA AND TECHNOLOGY SKILLS (P21 FRAMEWORK)

INFORMATION LITERACY	MEDIA LITERACY	ICT LITERACY
<b>Access and Evaluate Information</b> Access information efficiently (time) and effectively (sources)  Evaluate information critically and competently  <b>Use and Manage Information</b> Use information accurately and creatively for the issue or problem at hand  Manage the flow of information from a wide variety of sources  Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information	<b>Analyze Media</b> Understand both how and why media messages are constructed, and for what purposes  Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors  Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media  <b>Create Media Products</b> Understand and utilize the most appropriate media creation tools, characteristics and conventions  Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments	<b>Apply Technology Effectively</b> Use technology as a tool to research, organize, evaluate and communicate information  Use digital technologies (computers, PDAs, media players, GPS, etc.), communication or networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy  Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies