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Digitization and digital literacy of the population in Italy

Municipalities support adult education

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Introduction

This report on digitization and citizens' digital literacy is one of the intellectual results of the Erasmus + co-funded project "Municipalities Support Adult Education" (MSAE). The project is implemented from 2020 to 2022.

Local authorities are the closest support institution for local people, working closely with local adult education providers. This determines the special role of local governments in adult education.

The aim of the project is to develop and increase the role of local governments in supporting adult education in order to promote greater participation of adults in education.

This report provides an insight into digitization and the digital competence of the population in Latvia. Similar reports are prepared by all project partners, which allows comparing the situation in Latvia, Lithuania, Estonia and Italy.

This report has several sections. The first chapter enlighten the importance of digital skills, analyses the digitization situation in Italy and in the second section is reported the online analysis made by giving to Italian respondents the possibility to have their opinion about some topics of the digitalisation and the delivery of services online made by the public bodies.

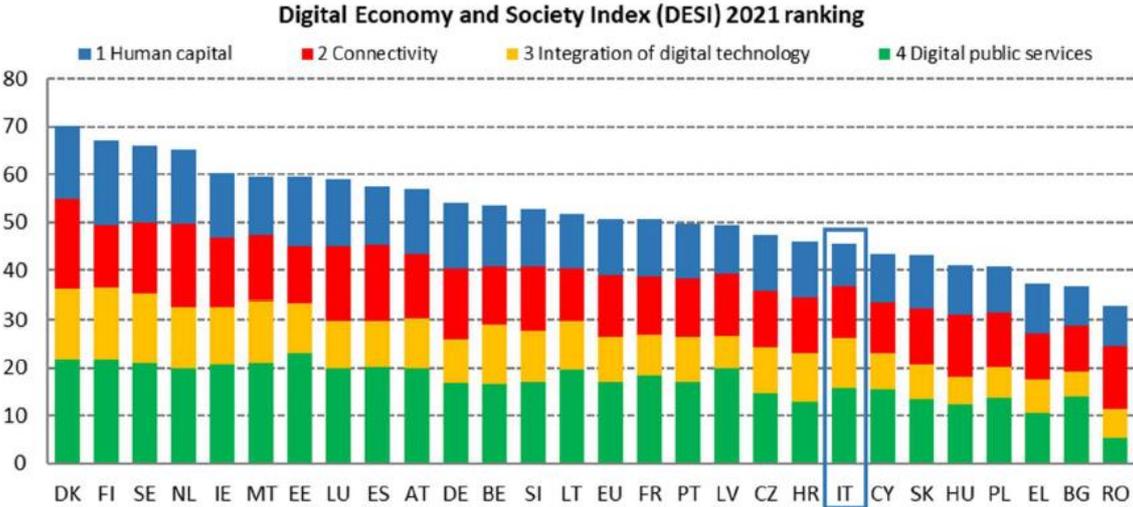
A summary and conclusions close this document and the report.

Digital Economy and Society Index (DESI)¹ 2021 Country Report Italy

The DESI report tracks the progress made by Member States in terms of their digitisation. It is structured around five chapters:

1 Connectivity	Fixed broadband, mobile broadband and prices
2 Human Capital	Internet use, basic and advanced digital skills
3 Use of Internet Services	Citizens' use of content, communication and online transactions
4 Integration of Digital Technology	Business digitisation and e-commerce
5 Digital Public Services	eGovernment and eHealth

The DESI was re-calculated for the previous years for all countries to reflect slight changes in the choice of indicators and corrections to the underlying indicator data. As a result, country scores and rankings may have changed from the previous publication. For further information please consult the DESI methodological note at <https://ec.europa.eu/digital-single-market/en/desi>.



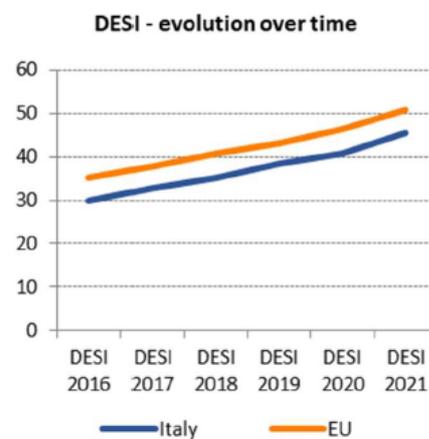
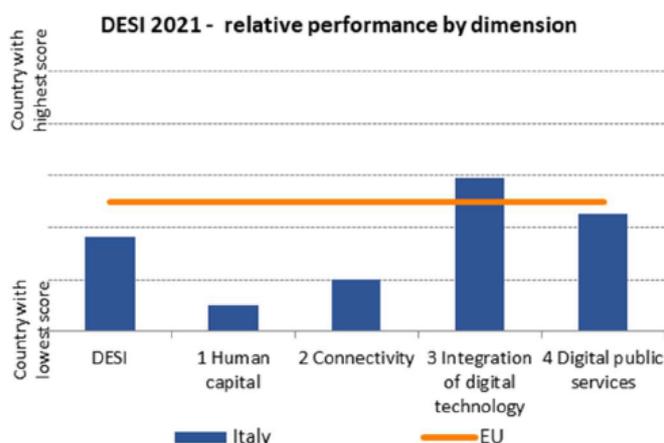
1 <https://digital-strategy.ec.europa.eu/en/policies/desi>.

	Italy	EU
	rank	score
DESI 2021	20	45.5
		50.7

Italy ranks 20th out of 27 EU Member States in the 2021 edition of the Digital Economy and Society Index (DESI). During 2020, Italy made some progress in both coverage and uptake of connectivity networks, with a particularly notable increase in the take-up of connectivity services offering speeds of at least 1 Gbps. However, the pace of fibre deployment slowed between 2019 and 2020, and efforts are still needed to increase the coverage of Very High Capacity Networks and 5G and to stimulate take-up.

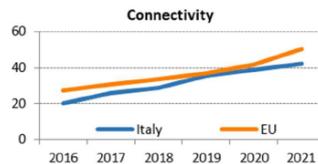
Italy lags significantly behind other EU countries on Human capital. Compared with the EU average, it records very low levels of basic and advanced digital skills. The share of Italian online users who use e-government services increased from 30% in 2019 to 36% in 2020, but it is still substantially below the EU average. The use of the electronic health record by people and healthcare professionals also remains uneven between regions.

Most Italian small and medium enterprises (69%) have at least a basic level of digital intensity, a share that is well above the EU average (60%). Italian enterprises perform very well in the use of e-invoices, although gaps remain in the use of technologies such as big data and Artificial Intelligence, and in the uptake of e-commerce. Legislation adopted in 2020 provides for reforms to speed up broadband rollout – including 5G – and to simplify and accelerate the digitalisation of public services. During 2020 and 2021, there was a sharp acceleration in the adoption of major enabling platforms for digital public services by public administrations. New reforms under the national Recovery and Resilience Plan are expected to give a further boost to the digitalisation of services and modernisation of public administration across the country. In recent years, the pressing need to act to reduce the major gaps in digital skills gained increasing attention. In 2020 Italy launched its first National Strategy for Digital Skills and a related operational plan that lists more than 100 specific actions and sets ambitious targets for 2025.



1 Connectivity

2 Connectivity	Italy rank	Italy score	EU score
DESI 2021	23	42.4	50.2



	DESI 2019	Italy DESI 2020	DESI 2021	EU DESI 2021
2a1 Overall fixed broadband take-up	60%	61%	61%	77%
% households	2018	2019	2020	2020
2a2 At least 100 Mbps fixed broadband take-up	9%	22%	28%	34%
% households	2018	2019	2020	2020
2a3 At least 1 Gbps take-up	NA	<0.01%	3.56%	1.3%
% households		2019	2020	2020
2b1 Fast broadband (NGA) coverage	88%	89%	93%	87%
% households	2018	2019	2020	2020
2b2 Fixed Very High Capacity Network (VHCN) coverage	24%	30%	34%	59%
% households	2018	2019	2020	2020
2c1 4G coverage	98.9%	98.9%	99.3%	99.7%
% populated areas	2018	2019	2020	2020
2c2 5G readiness	60%	60%	60%	51%
Assigned spectrum as a % of total harmonised 5G spectrum	2019	2020	2021	2021
2c3 5G coverage	NA	NA	8%	14%
% populated areas			2020	2020
2c4 Mobile broadband take-up	39%	49%	49%	71%
% individuals	2018	2019	2019	2019
2d1 Broadband price index	NA	74	74	69
Score (0-100)		2019	2020	2020

With an overall score of 42.4 Italy ranks 23rd among EU countries in connectivity. 61% of households subscribe to fixed broadband, somewhat lower than the EU average (77%). The percentage of households with a take-up of at least 100 Mbps continued to grow, rising from 22% in 2019 to 28% in 2020, which, however, still places the country below the EU average of 34%. 3.6% of households had a take-up of at least 1 Gbps in 2020, a remarkable increase compared with 2019 and a percentage

that places Italy above the EU average for this indicator. Concerning fast broadband next generation access (NGA) coverage, the number of households included is 93%, above the EU average of 87%. On fixed Very High Capacity Network coverage, the percentage of households covered was 34% in 2020 – an increase of four percentage points compared to 2019, but still considerably below the EU average of 59%. FTTP coverage stood at 33.7% of households (up from 30% in 2019), increasing almost at the same pace as the EU average (42.5% in 2020, up from 37.5% the previous year). Only 8% of populated areas are covered by 5G, lower than the EU average of 14%, in spite of the relatively high score of 60% in 5G readiness. On the broadband price index, Italy's score of 74 did not change between 2019 and 2020 and remains higher than the EU average.

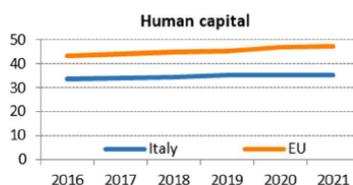
In recent years Italy has pursued the EU connectivity targets through a combination of regulation and public policy, and measures to boost supply and demand. During 2020 in particular, with the aim also of a rapid response to the COVID-19 outbreak, the Italian authorities devoted particular attention to the demand side, setting up phase I of the 'voucher plan', approved by the Commission with Decision C(2020) 5269. The voucher plan, dedicated to households with a gross income per year of less than €20,000, provides for a contribution of up to €500 to upgrade fixed lines or to activate a new line with a speed of at least 30 Mbps. A new measure is expected to be launched in 2021 which will mobilise around EUR 900 million and will be dedicated to both residential users and businesses (SMEs). The 'School Plan', which received funding of over EUR 400 million, provides connectivity of up to 1 Gbps for state schools and educational institutions, connecting all first and second-level secondary school complexes throughout the national territory as well as all primary and kindergarten complexes located in the areas already concerned by infrastructural interventions (called 'white areas'). About 35,000 buildings are involved in total.

The revised national ultra-broadband plan aims to reach and exceed the objectives set by the European Commission for 2030 by introducing a target of at least 1 Gbps for all by 2026. The plan provides that where fixed and wireless private networks cannot guarantee achievement of this target, the State can intervene by creating the necessary infrastructures to reach it. In terms of investments, it has been estimated that public resources are needed to fill the fixed infrastructural gap in areas not covered by private operators, i.e. approximately 8.5 million households.

In Italy, the rights of spectrum use in 5G pioneer bands, namely the 700 MHz, 3.6 GHz, and 26 GHz bands, were awarded in 2018 and before. However, not all bands are available; 700MHz will not be available until 1 July 2022. The Law decrees 'Cura Italia' and 'Semplificazioni 2021' include measures to boost 5G coverage. The decrees, in particular, set limitations on the veto power of local authorities in the instalment of antennas. The limits of electromagnetic emissions are 6 V/m and 0.1 Watt/m², lower than the caps recommended in the Council Recommendation.

2 Human Capital

1 Human capital	Italy		EU
	rank	score	score
DESI 2021	25	35.1	47.1



	Italy			EU
	DESI 2019	DESI 2020	DESI 2021	DESI 2021
1a1 At least basic digital skills	NA	42%	42%	56%
% individuals	2017	2019	2019	2019
1a2 Above basic digital skills	NA	22%	22%	31%
% individuals	2017	2019	2019	2019
1a3 At least basic software skills	NA	45%	45%	58%
% individuals	2017	2019	2019	2019
1b1 ICT specialists	3.6%	3.5%	3.6%	4.3%
% individuals in employment aged 15-74	2018	2019	2020	2020
1b2 Female ICT specialists	15%	15%	16%	19%
% ICT specialists	2018	2019	2020	2020
1b3 Enterprises providing ICT training	17%	19%	15%	20%
% enterprises	2018	2019	2020	2020
1b4 ICT graduates	1.0%	1.3%	1.3%	3.9%
% graduates	2017	2018	2019	2019

In Human capital, Italy ranks 25th of 27 EU countries. Only 42% of people aged 16-74 years have at least basic digital skills (56% in the EU) and only 22% have above basic digital skills (31% in the EU). The percentage of ICT specialists in Italy is 3.6% of total employment, remaining below the EU average (4.3%). Only 1.3% of Italian graduates study ICT, well below the EU average. Italy's performance is closer to the EU average on female ICT specialists: they represent 16% of ICT specialists (the EU

average is 19%). Only 15% of Italian enterprises provide ICT training to their employees, five percentage points below the EU average. In 2020 Italy launched its first National Strategy for Digital Skills, which sets out a comprehensive approach to digital skills development to narrow the gaps with other EU countries¹. Comprising four strands, it covers a broad range of areas and target groups:

- students in education and training, to integrate e-skills within primary and secondary schools, university and higher-education curricula;
- active workforce, covering e-leadership, and basic as well as advanced and specialised digital skills;
- ICT specialists, to enhance the country's ability to develop skills for new markets and new jobs;
- general public, to develop the digital skills needed to exercise citizenship rights.

The related operational plan, published in December 2020, translates the strategy into specific actions and ambitious targets for 2025. It catalyses efforts on digital skills in Italy by introducing new initiatives and reinforcing ongoing ones. Looking at some of the initiatives already under way, between 2020 and 2021 two important projects supported digital literacy among the population. In 2020, the nodes of the digital facilitation services network trained more than 100,000 people and helped them access the most common online services, including digital public services³. The government also promoted training on digital skills for individuals at risk of digital exclusion through the 'digital civil service'.

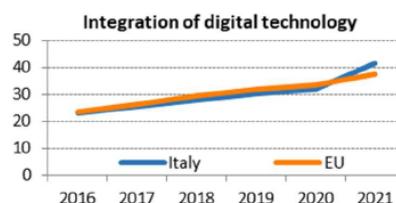
Measures to support the reskilling and upskilling of the workforce and advanced digital skills include the Transition 4.0 national plan, which further extended the tax credit for 'Training 4.0'. In 2020 and 2021, projects for capacity building in the area of digital also involved the network of technology transfer centres. For example, the Chamber of Commerce (which runs the Punti Impresa Digitale) developed digital maturity-assessment tools, including a platform dedicated to the assessment of digital skills ('digital skill voyager').

A key role in the implementation of the National Strategy for Digital Skills is played by the Italian Coalition for Digital Skills and Jobs. The coalition builds on 'Repubblica Digitale', a multi-stakeholder initiative that promotes digital skills at all levels. Since its launch in 2019, more than 180 organisations have joined the Italian coalition and contributed with more than 220 projects. In 2020, the coalition's initiatives trained more than 2.7 million students, about 70,000 teachers, over 900,000 other people, and more than 250,000 workers in the private and public sector⁴. A number of projects specifically addressed the

gender gap. Finally, between 2020 and 2021, more than 10,000 EU Code Week events were organised across Italy, targeting primary and secondary-school pupils in particular. In conclusion, Italy is faced with significant shortcomings in both basic and advanced digital skills, which risk translating into the digital exclusion of a significant part of the population and limit the capacity of enterprises to innovate. The National Digital Skills Strategy represents an important milestone and opportunity to narrow this gap. It is crucial to heighten the focus on human capital and continue efforts on education, reskilling and upskilling and training on the job in technology-intensive sectors.

3 Integration of digital technology

3 Integration of digital technology	rank	Italy score	EU score
DESI 2021	10	41.4	37.6



	Italy			EU
	DESI 2019	DESI 2020	DESI 2021	DESI 2021
3a1 SMEs with at least a basic level of digital intensity % SMEs	NA	NA	69%	60%
3b1 Electronic information sharing % enterprises	37%	35%	35%	36%
3b2 Social media % enterprises	17%	22%	22%	23%
3b3 Big data % enterprises	7%	7%	9%	14%
3b4 Cloud % enterprises	15%	15%	38%	26%
3b5 AI % enterprises	NA	NA	18%	25%
3b6 ICT for environmental sustainability % enterprises having medium/high intensity of green action through ICT	NA	NA	60%	66%
3b7 e-Invoices % enterprises	42%	42%	95%	32%
3c1 SMEs selling online % SMEs	10%	10%	11%	17%
3c2 e-Commerce turnover % SME turnover	8%	8%	9%	12%
3c3 Selling online cross-border % SMEs	6%	6%	6%	8%

Italy ranks 10th in the EU in Integration of digital technology. Most Italian SMEs have at least a basic level of digital intensity (69%, well above the EU average of 60%). Italian enterprises perform very well in the use of e-invoices: 95% of them use electronic invoices, a figure that is almost three times the EU average and is the result of legislative interventions between 2014 and 2019. From 2018 to 2020, the share of enterprises using cloud services rose sharply, reaching 38% (from 15% in 2018). Italy's performance remains weak in

other areas. The use of big data is low (used by 9% of Italian enterprises compared with an EU average of 14%), as is the use of technologies based on Artificial Intelligence (18% of Italian enterprises; the EU average is 25%). The uptake of e-commerce and the use of ICT for environmental sustainability are also below the EU average. In terms of policy developments, the government revised and further extended the fiscal benefit under Transition 4.0, moving from hyper-depreciation to tax credits. The results of the first years of implementation of the hyper-depreciation measure show that it was used widely by SMEs and that it stimulated investments in Industry 4.0 assets, although the uptake of the benefits was relatively higher among medium and large enterprises and largely concentrated in the North of Italy¹⁰. Support services and technology transfer centres play a key role for SMEs digitalisation. In 2020, Italy selected 45 national hubs which will participate in the restricted call for the establishment of the network of European Digital Innovation Hubs (EDIHs) under the Digital Europe Programme. The hubs selected by Italy cover technologies such as Artificial Intelligence, High Performance Computing (HPC) and cybersecurity, and will supplement the existing network of technology-transfer centres in the country. In advanced digital technologies, Italy is involved in a number of European initiatives. In March 2021, it launched the call for expression of interest for the 'Important Projects of Common European Interest' (IPCEI) on Next Generation Cloud Infrastructure and Services. It will support innovative projects for the development of cloud infrastructure and services, with potential applications in areas such as data protection, cybersecurity, industrial automation or healthcare. Italy is also part of the first IPCEI on microelectronics (started in 2018) and at the end of 2020 published a call for expression of interest to select enterprises for the second IPCEI in this area. This second IPCEI has the overall objective of equipping the EU with key strategic capacities in the sector of processors and semiconductor technologies, which are essential to power the EU's critical digital infrastructures, artificial intelligence-enabled systems and communication networks. Italy is one of the most active EU players in the field of supercomputing/HPC. The country hosts supercomputers ranked in the world's Top 500 systems (two of

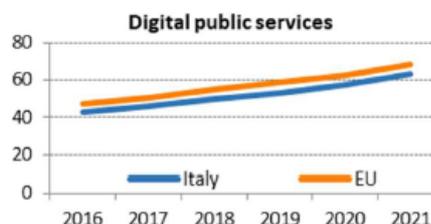
them in the Top 20). With the support of EuroHPC, Italy is leading a consortium for the development of a supercomputer that will be among the top five in the world (LEONARDO). It will be installed at the end of 2021 in the new data centre located in Bologna.

Boosting the digital economy requires a coordinated and comprehensive approach which combines investment incentives, support services and awareness raising, and builds strong links with investments in human capital. To achieve a long-lasting transformation, it is important to continue efforts to build capacity among Italian enterprises, equipping people with relevant advanced digital skills and in parallel creating opportunities for young people and high-quality jobs. It is also important that Italy continues its efforts in advanced digital technologies and develops strategic capacities.

4 Digital Public Services

Italy ranks 18th in the EU in Digital public services. Despite the improvement recorded, the use of digital public services remains relatively low. The share of Italian online users who resort to e-government services increased from 30% in 2019 to 36% in 2020. While this is a notable

4 Digital public services	Italy		EU
	rank	score	score
DESI 2021	18	63.2	68.1



	Italy			EU
	DESI 2019	DESI 2020	DESI 2021	DESI 2021
4a1 e-Government users % internet users	32%	30%	36%	64%
4a2 Pre-filled forms Score (0 to 100)	NA	NA	51	63
4a3 Digital public services for citizens Score (0 to 100)	NA	NA	69	75
4a4 Digital public services for businesses Score (0 to 100)	NA	NA	89	84
4a5 Open data % maximum score	NA	NA	87%	78%

increase, it remains well below the EU average of 64%. Italy outperforms the EU on the offer of digital public services for businesses and open data, but is below the EU average in digital public services for citizens and the availability of pre-filled forms.

During 2020 and 2021, there was a sharp acceleration in the adoption of major enabling platforms for digital public services. The number of digital identities issued (SPID, the eIDAS-compliant digital identity system) reached 20 million in April 2021, an increase of 400% compared to April 2019; the public administrations using SPID grew to 7,420, an increase of 80% compared with 2020. The IO app was launched in April 2020 as a one-stop-shop for access to user-centric digital public services, also through smartphone; a year later, in April 2021, it had reached 11 million downloads. The government made use of the IO app mandatory to access some financial incentives, with the objective of encouraging the use of digital tools by people. This initiative played a key role in the successful rollout of the app.

Good progress was also recorded in the implementation of the national digital population registry (ANPR), which aims to increase efficiency by consolidating personal information spread across administrations into a single register. It is expected to be adopted by all municipalities by 2021. Furthermore, in June 2020, the government launched a new Ultra-broadband Plan platform increasing the amount of open data made available to the general public and other users. Legislative initiatives undertaken between 2020 and 2021 introduced a mix of obligations and incentives to boost the adoption of the main e-government platforms and are expected to give further impetus to the modernisation of the public administration across the country. Regarding e-health, the electronic health record (EHR) is operational in all regions and has been activated by the large majority of citizens. However, the level of uptake by both people and healthcare professionals varies widely at regional level.

Finally, regarding digital skills in the public sector, the operational plan of the National Digital Skills Strategy includes 17 projects to strengthen such skills, combining the revision of

recruitment policies with targeted training, including in collaboration with universities, and with the promotion of communities of practice involving researchers, business managers and civil servants. Overall, Italy continued to improve digital public services for citizens and enterprises. The legislative initiatives taken are expected to boost the adoption of enabling platforms by all public administrations, including local ones. The full deployment of the IO app, combined with the reinforcement of digital skills among the population, might also contribute to a gradual increase in the uptake of digital public services by the general public and by enterprises. Simplification efforts, measures to ensure interoperability, and capacity building in the public administration are all important complementary measures to promote and reinforce the digitalisation of public administration and public services.

5 Digital Public Services in Italy's Recovery and Resilience Plan

The plan includes significant investments for the digitalisation of public administration, supporting the modernisation of the digital infrastructure, the reinforcement of cybersecurity, the interoperability of databases and the improvement of digital public services for the general public and businesses.

Investments of EUR 1.9 billion are expected to help build a secure and energy-efficient national cloud-based hybrid infrastructure (called Polo Strategico Nazionale) and migrate local and central public administrations' IT system to a cloud-based system for a more efficient and secure delivery of public services. Moreover, a reform ('cloud first and interoperability') is planned to remove obstacles to cloud adoption, streamline data-exchange processes between public administrations, and boost the broad adoption of digital services, by introducing a set of incentives and obligations.

Measures also aim to increase the accessibility and interoperability of online public services and complete key digital platforms like SPID and ANPR. Leveraging on the above-mentioned 'middleware' platforms (ANPR, SPID, IO), the plan earmarks an investment of EUR 556 million for the creation of a National Digital Data Platform (Piattaforma Digitale Nazionale Dati). Through a catalogue of application programming interfaces (APIs), the platform aims to guarantee the interoperability of datasets and empower the once-only principle, including with forms pre-filled with information already available to the government across the different institutions. In parallel, three investments amounting to EUR 783 million are expected to improve quality, accessibility and compliance with Single Digital Gateway procedures of citizen-facing digital services, including municipalities, schools and cultural institution websites.

6 Digital skills survey analysis in Italy

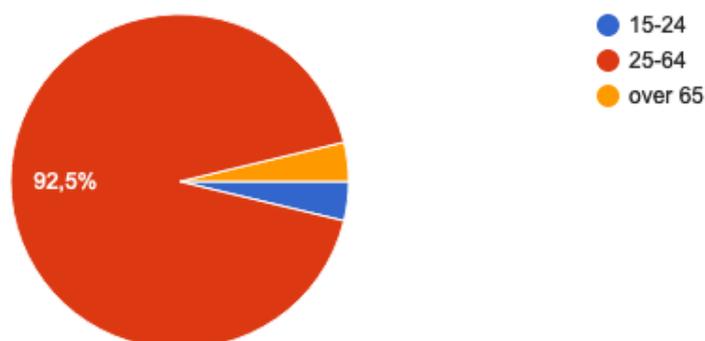
European Agenda for Adult Learning highlights the need to significantly increase adult participation in formal, non-formal and informal learning whether to acquire work skills, for active citizenship, or for personal development and fulfilment. The Agenda outlines a vision of how adult learning should develop in Europe by 2020 and sets the following specific priorities for the years 2015 – 2020, including effective outreach, guidance and motivation strategies to reach and assist adult learners. One of the most pressing challenges is strengthening its competitiveness to increase prosperity by reducing the productivity gap with other developed economies, while addressing the impact of the economy on climate (environmental) change, ensuring equal education possibilities in all regions of the partners' countries. One of the main lines of action is investing in growth of human capital in all levels and increasing business efficiency. Information Report on the Proposal for the National Development Plan 2021-2027 objectives, priorities and lines of action, stress the "Changing Paradigm and habits - the Way to Development", which means that many obstacles to development, including our attitudes, habits and thinking need to be changed - both in terms of environment, work, education and collaboration with peers.

Characteristics of respondents

There were 53 respondents, the large majority of them the 92,5% while only the 3,8% of the other 2 sections were people in retirement or minors.

1. your age

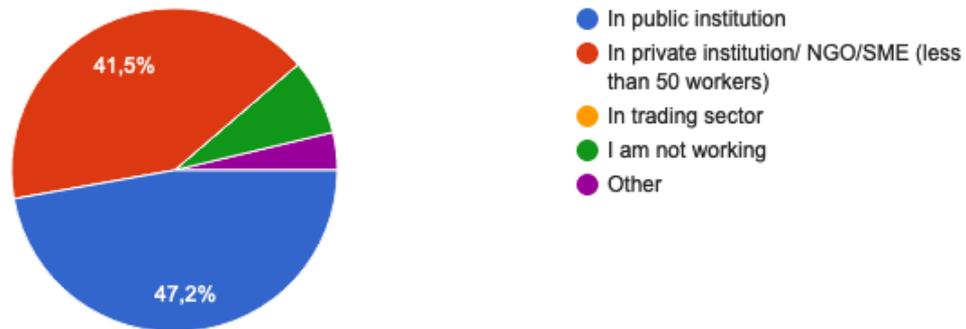
53 risposte



Less than half of respondents (47,2% respondents) are working in the public sector (at schools, public offices, administrations, social care centres or in the Municipalities) while the other 41,5% are working in the private sector in a general way. Only the 7,5% are unemployed and other places is a residual number.

2. Where do you work?

53 risposte



Digital skills at work

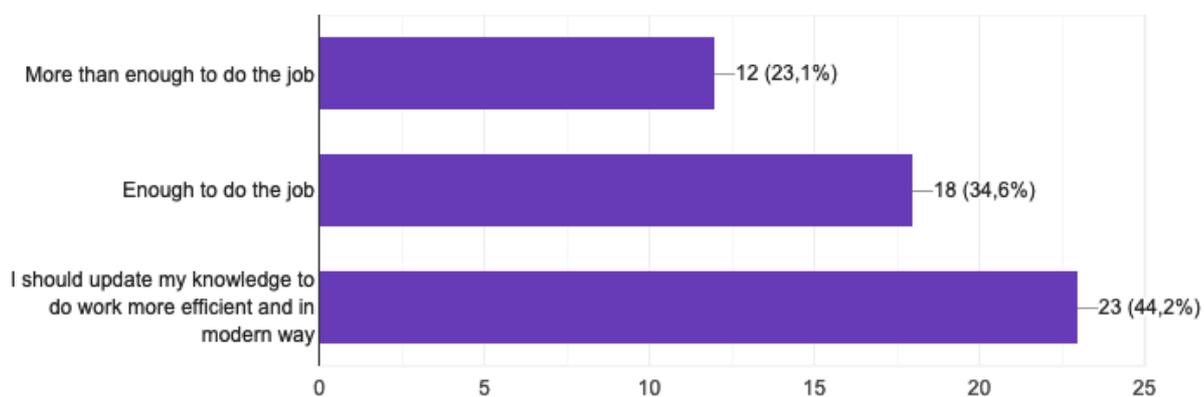
The 23% of them feel that the skills they are enough to do the job and this is the smaller group as the other 34,6% think that they know enough for conducting their job and the sum of these two groups make the 57,7% of the global number of respondents that think they are enough or more than enough skills for conducting their job properly.

But the other 44,2% consider that their ICT skills are insufficient and that they should upgrade their IT skills to work more efficiently and in a modern way. This is a bit less than the half of the respondents.

3. Your self-evaluation of IT skills you need for work. I have



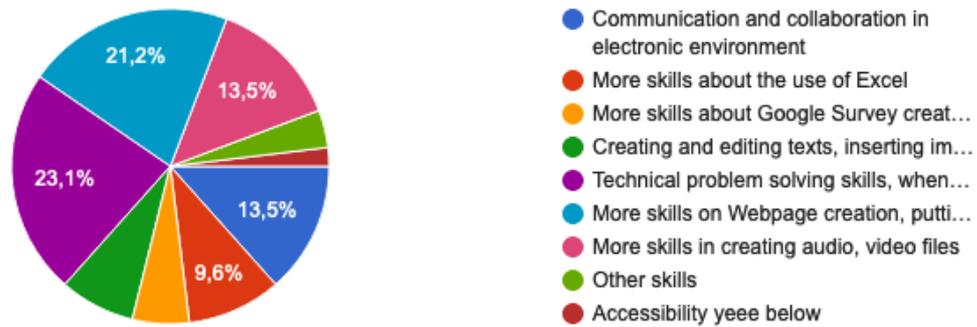
52 risposte



Answering the question: "What do you think you should learn to improve your competences at work and private life?" it was possible to give a multiple choice, so the bigger group is asking to know more about "Technical problem solving skills when using the computer", the 23,1% of the total, and the second group is asking for "more skills in the creation of webpages or putting info on the webpages", the 21,2%. Both these groups have the 44,3% of the total of answers. Two other groups with the same amount of 13,5% are the groups asking for "more skills in creating audio and video files" and a second group oriented in "communication and elaboration in the electronic environment".

4. What do you think you should learn to raise your competence at work or in private life ?

52 risposte



Briefly other skills mentioned in the survey are reported below.

4a. If you write "other skills" can you briefly describe which ones ?

4 risposte

uploading information onto moodle platform

More skills with photo editing, web design

How to efficiently upload accessible media across multiple social media simultaneously

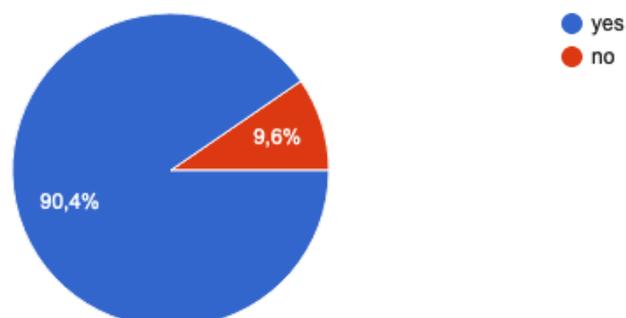
Only in the field of change of laws

Websites of the municipalities and their institutions and public e-services

Definitely more than the 90% of the Italian responding to the survey said that they use the public services and websites as a source of information

5. Do you use webpage of municipalities and their institutions as information source?

52 risposte



More than 32,7% of the respondents are satisfied with the municipalities' website and they find them easy to use. Around the 40% think that these public websites are easy to use while the 35,4% of answers think that public websites are not easy to use and they don't find inside them easily the pages with the contacts in order to have an easy access to information. While the 17% of them need to have consultation for fulfilling the contents online.

6. What is Your opinion about webpages of your municipality:

52 risposte

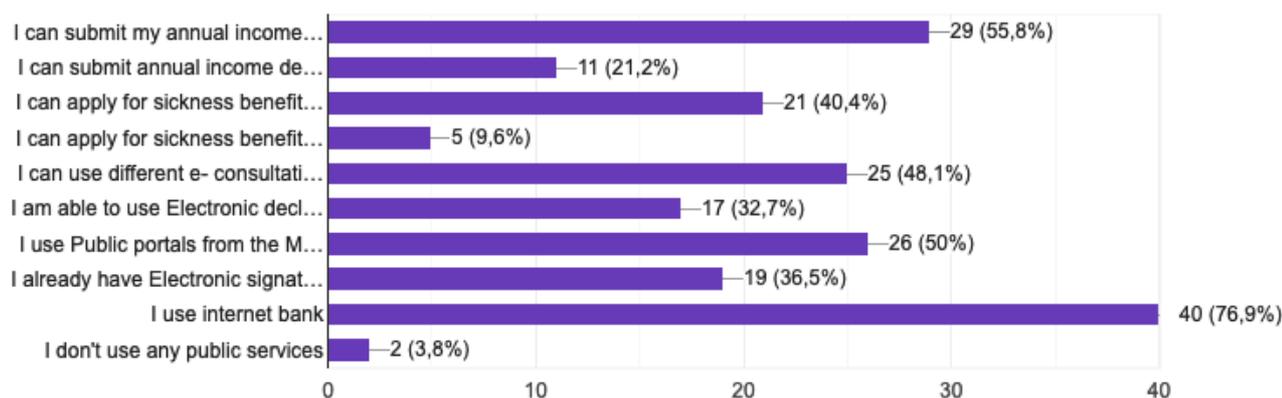


Use of electronic public services

The large majority of the respondents use the bank online, 76,9%, and the 55,8% of them is used to submit their income declaration online by themselves. It was possible to give multiple answers to respondents usually apply internet services from the public portal of the municipality and they are used to do e-consultations online. (50% and 48,1%). The other two big groups are the one which are applying the health benefits online (40,4%) and the group of one which have the electronic signature already active (36,5%).

7. Are you able to use any electronic public services mentioned below

52 risposte



for the one who don't need to use public portals and free public electronic environments, the respondents pointed out:

prefer face-to-face services (38% of negative responses)

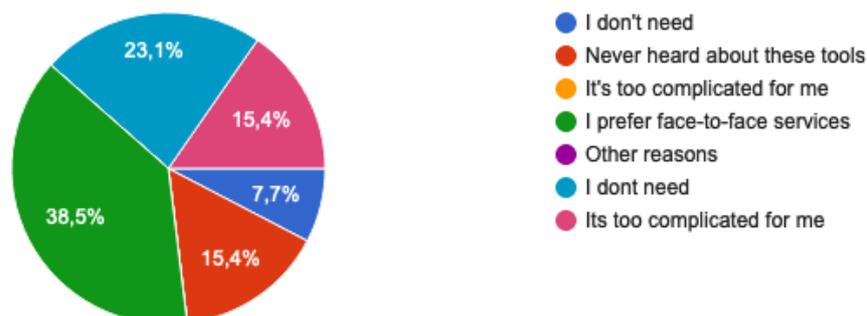
No need (23,1%)

The use is too complicated (15,4%)

And a not so small amount of answers (15,4%) have never heard about these services.

8. If not, what are reasons for non-use of public services' portals or free public electronic tools

13 risposte



Information and data literacy

Self-assessment of skills using search engines and finding information (Google, Wiki or other) and results are that:

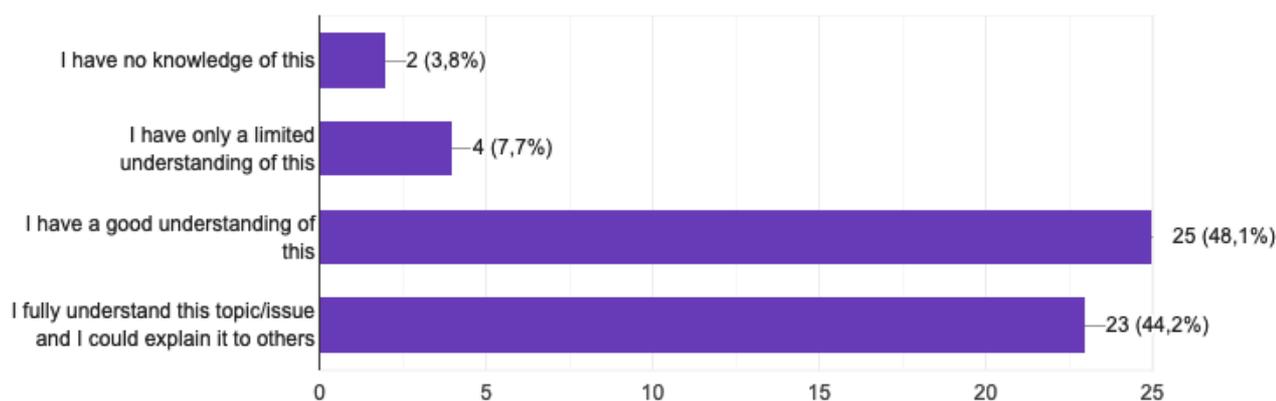
44,2% fully understand the topic of “how” to find information and they can explain to others, and the 48,1% of the respondents have a good understanding of this topic.

- 48% of the respondents rate their knowledge as good
- 30.4% of the respondents are very good at using and explaining to others

9. I know how to use search engine to find info (Google, wiki or other)



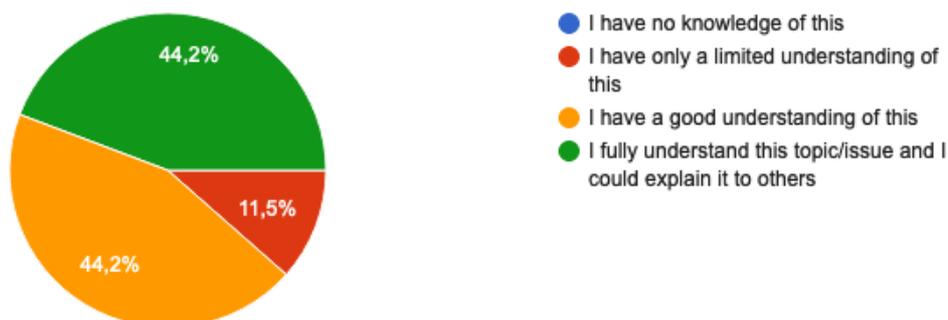
52 risposte



I regularly store information on an external storage medium (memory stick) and / or in the cloud.

10. I regularly store data in USB and/or clouds

52 risposte



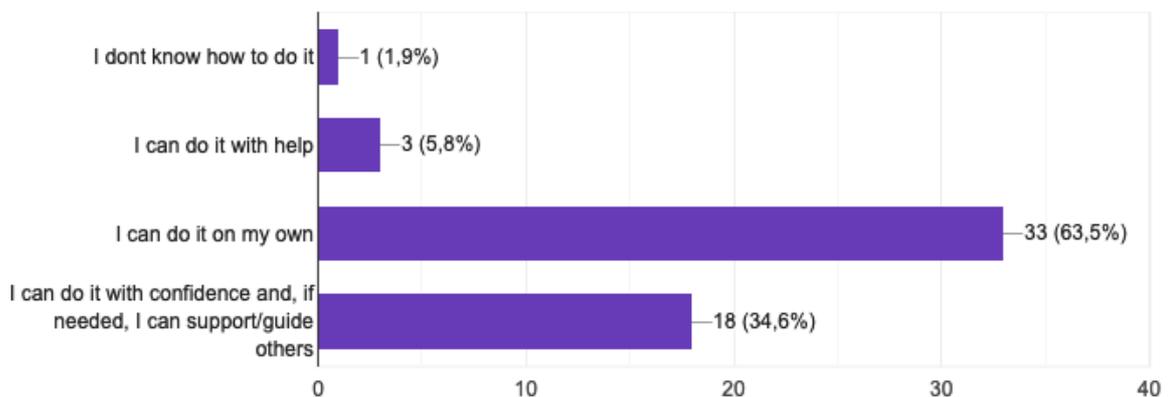
Here the answers were split in 40-40 of the respondents which consider their knowledge and skills to be good in this respect, and the second 44,2% consider to have a good understanding of this. So the 88,4% of the respondents seems to use regularly memory sticks and other devices for storage data easily.

Talking about comparing prices from different internet shops and service providers, it appears that people cope better with e-commerce - when asked if people can compare the prices of products in online stores, more than half answered that they know how to:

- I can do by myself (63,5%) and
- I can do with confidence and, if needed, I can support and guide others (34,6%)

11. I compare prices from different internet shops/ service providers

52 risposte

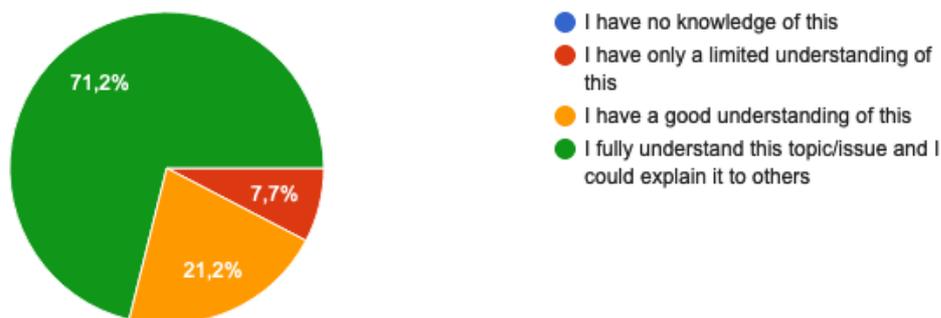


Communication and collaboration

The 92,4% of people can send, reply to and forward e-mails, including the 21,2% which have a good understanding of this as the others can instruct others if necessary, only a small minority have a limited understanding of having communication and collaboration online.

12. I know how to send, reply and forward e-mails.

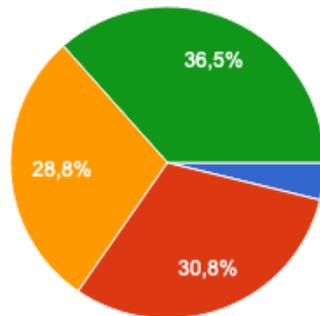
52 risposte



About a third of the respondents can create questionnaires and documents and collaborate on various web platforms (Google Drive, Dropbox, PBworks or others) very well and independently. The 36,5% can do with confidence and can support others in doing it, the 28,8% can work independently, so the percent of able people that can work is the 65,3% of the respondents.

13. I can create questionnaires, documents and collaborate using online platforms: google docs, dropbox, pbworks or others.

52 risposte

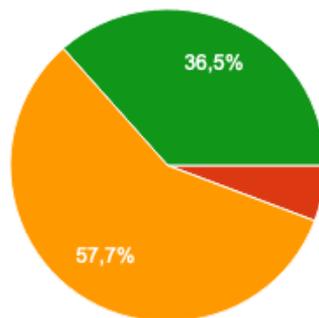


- I can't do it
- I can do it with help
- I can do it by own
- I can do it with confidence and, if needed, I can support/guide others

Better value we find at the question 14 where the global amount of people which fully understand and can lead video and zoom conferences using different platforms as Zoom / Jitsi / Teams or some other platform (including instructing others) is the 94,2%. So it seems that communication online and video communication is really easy for them.

14. I can lead group meeting/ videoconference in Zoom / Jitsi / team or in other platforms.

52 risposte



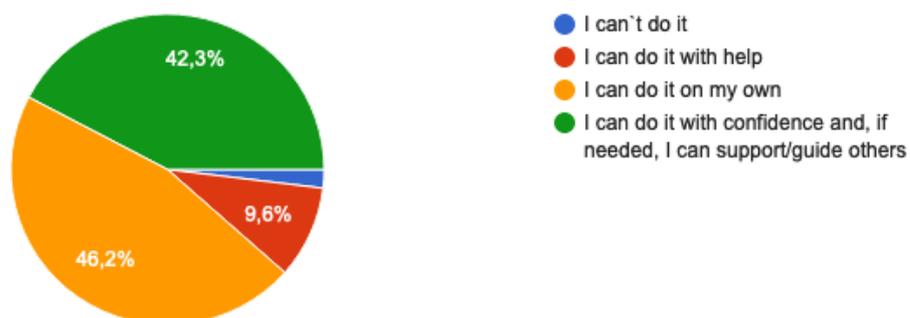
- I have no knowledge of this
- I can only reply to video phone, if invited
- I have a good understanding of this
- I fully understand this topic/issue and I could explain it to others

Digital content creation

More or less the same situation we found asking to people if they can create and edit texts or insert images, the 88,5% answer that they can do with confidence or by themselves.

15. I Can create and edit texts, insert images

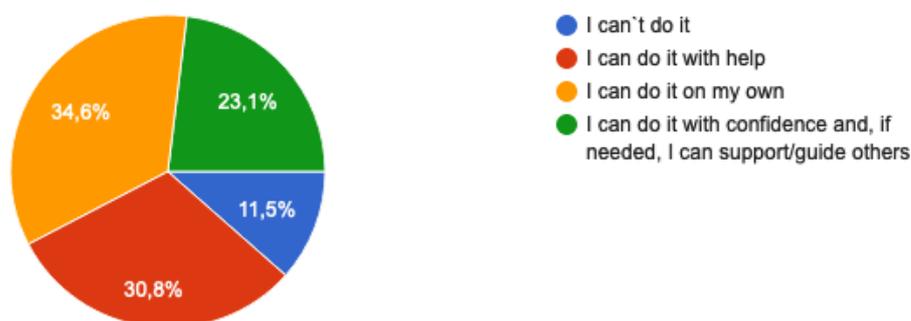
52 risposte



the situation is different talking about Excel or spreadsheets where only the 57,7% is able to manage with confidence or by themselves, a big group of the 30,8% said that they can do it with help and they don't feel themselves so able to manage numbers alone, and the 11,5% is not able to manage numbers at all.

16. I can use formulas and other possibilities of Excel toolbar

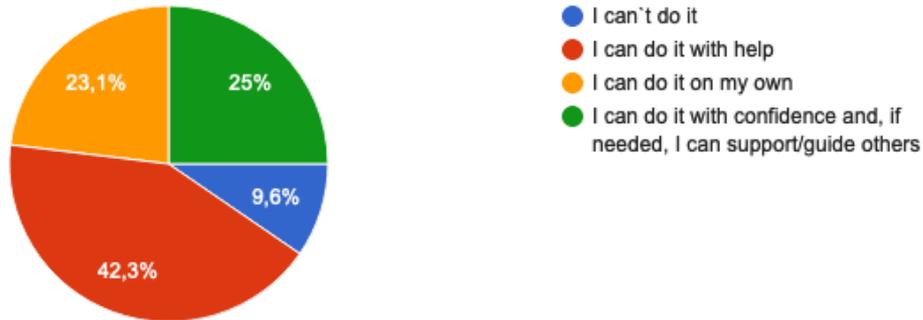
52 risposte



the same situation we can find when people is going to produce videos or audios where only the 48,1% is able to do it with confidence or by themselves. The bigger group said, the 42,3%, that they feel insecure about creating audio and video files (data sets) and only the 9,6% say that they don't know at all how to do.

17. I can create audio and video files

52 risposte

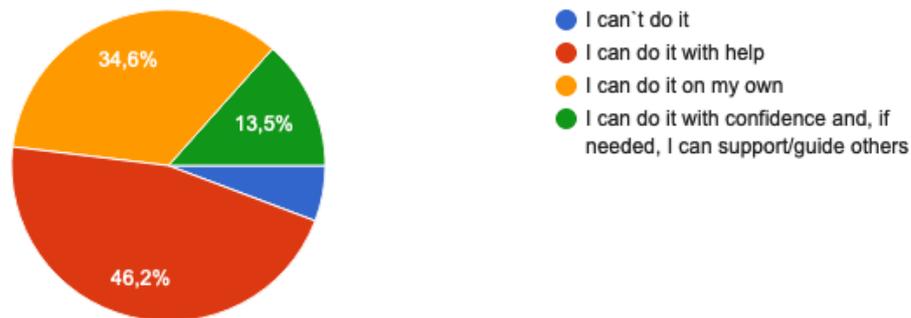


Safety

The biggest group, the 46,2% can use prevention measures against online attacks for computer only with help, and this a lack of knowledge of the Italian respondents. But, in the other hand, the 34,6% is able to do by themselves. In the middle only a small group can act safely and with confidence.

18. I use many prevention measures against online attacks for computer (https encryption, antiviruses, firewalls)

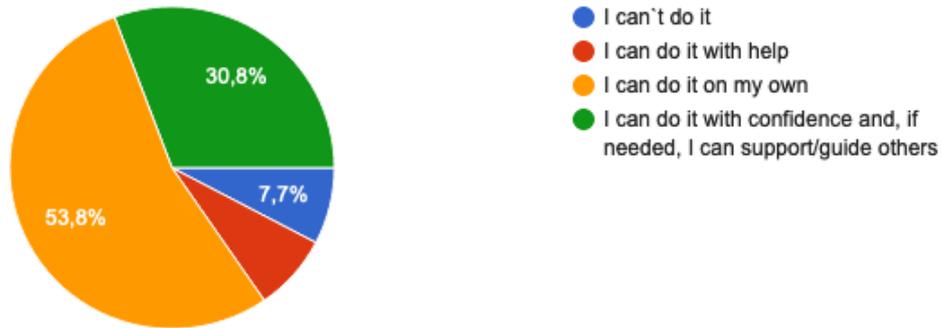
52 risposte



Much better are respondents rating their knowledge of personal data protection, the 53,8%. And the 84,6% of respondents said that they know which personal data they can share and display online and which one it's better not to share at all.

19. I know which personal data I should not share and display online (e.g. on social media, in spam emails etc.).

52 risposte

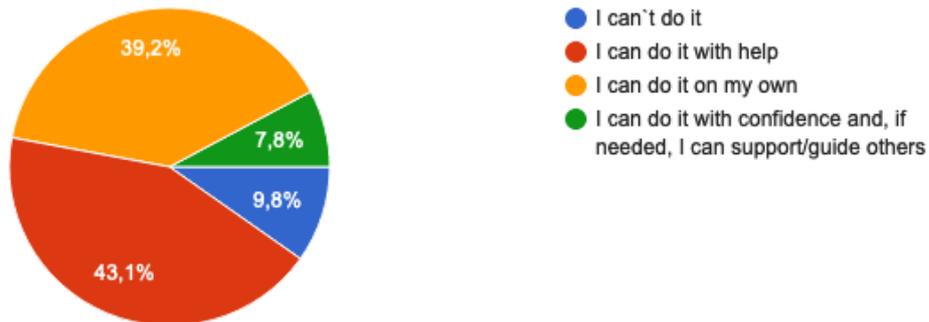


Problem solving

More than 43,1% of respondents need help solving technical problems with the computer. As in the other hand the 39,2% of them say that they can do by themselves, so the champion is divided in two field, but the number of people that can solve technical problem without any help is only the 47%, the other 53% need help or don't know how to do.

20. When I face a technical problem on computer, I am able to find solutions on the Internet.

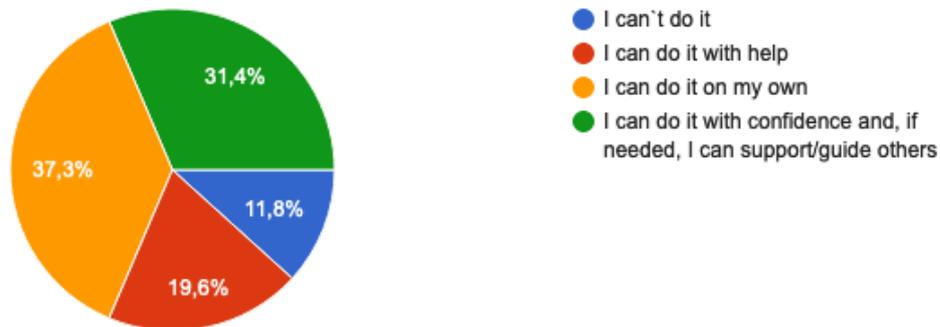
51 risposte



Changing the technical settings also creates difficulties for the respondents, the 68,7% can do it alone and with confidence. But the bigger part of the respondents need a help or they don't know how to do, the 56,9% of them.

21. I can change different computer settings, if needed (insert comments, footnotes, change spaces between lines etc)

51 risposte



Conclusions and Recommendations

Apart from analysing digital skills in the workplace the study we can give a number of recommendations that can be formulated.

1. Raise awareness on digital technologies and the need for digital skills to support and improve business performance, productivity and internal organisation in the companies, and of the need for digital skills in relation to new digital technologies.
2. Promote access to digital technologies, particularly for micro and small sized companies. Loans, grants and other mechanisms should be used to enhance and support access to digital technologies for the ones which have more problems in accessing the information technology.
3. Expand the availability of digital skills through the education and training system. Programmes at all levels and sectors of education should be updated and digital skills should be part of the core competences required at every level of education.
4. Promote access to training to employers through their professional or sectoral organisations and associations, or through governmental channels, in order to realise some programmes about information technology for the transversal tasks of every kind of workposition.
5. Include digital skills in a wider skills strategy in which other transversal skills relevant to employers such as soft skills and communication skills are included.
6. Provide access to funding for digital technologies and digital skills development even personally to the single learner and not through the companies.
7. Reduce the digital divide, focusing in particular on the categories of individuals who do not possess digital skills and are consequently at risk of marginalisation not only in the labour market, but also in day-to-day life, which can contribute to social and economic exclusion.