Observatório do Emprego

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The digital decade in Europe

In March 2021, the European Commission released the document: "2030 Digital Compass: the European way for the Digital Decade" that advances a vision for achieving a successful digital transformation, based on training and technological leadership. The document proposes a governance structure to facilitate and accelerate the launch of multi-country projects and to establish a multilateral forum for promoting the dialogue with citizens regarding contents as digital rights.

The targets defined for the EU in 2030 include: having a population with digital skills and highly qualified professionals in the digital sector; having safe, effective and sustainable digital infrastructures; the digital transformation of companies; and the digitization of public services.

The measures aimed at designing the European way to carry out the digital transformation are aligned with four key dimensions:

https://ec.europa.eu/commission/presscorner/detail/pt/QANDA_21_984

(1) Skills – to have 20 million of ICT specialists working in the EU, as compared to 7.8 million in 2019, and a more balanced gender representation in the sector. Additionally, it is predicted that at least 80% of the population will develop basic digital skills.

(2) Safe and sustainable digital infrastructures – one of the targets is to 5G for all populated areas.

(3) Digitization of public services - it is predicted that all the essential public services will be available online; 100% of medical records will be available in electronic format and, at least, 80% of citizens should use electronic identification solutions.

(4) Digital transformation of companies - 75% of EU companies should use cloud computing, big data and artificial intelligence services. In this context, it is also expected that more than 90% of European SMEs will reach, at least, the basic level of intensity in the digital world (use and application of the new technologies). Moreover it is estimated that there will be an 100% increase, as compared to 2021, of the so-called "unicorn companies".

In this sense, it is also proposed to include a set of principles and digital rights that seek to guide the EU and its Member States in the design of digital rules and regulations to promote and defend EU values in the digital space. Education for universal digital skills is mentioned, along with ethical principles for human-centered algorithms, protection and empowerment of children in the online space. In addition, digital partnerships will stimulate research cooperation and invest in digital connectivity and emerging technologies.

Cybersecurity challenges

With the increase in the adoption of technology in society, cybersecurity becomes increasingly necessary. The digital transformation depends on connectivity, artificial intelligence, quantum computing and next generation approaches have the potential to generate new risks to the global ecosystem. Businesses and governments face new challenges to ensure integrity and trust in emerging technologies. The COVID-19 pandemics accelerated the adoption of certain technologies, and exposed cyber vulnerabilities and technological inequalities in the society.

The complexity of digitization creates challenges and risks. Many of these risks are associated with "fake news", that are a common feature in many areas, including in the context of elections, for example. Other risks involve cyber-attacks to critical infrastructure and attacks on health systems. In this context, the FBI in United States reported that cyber security complaints more than tripled during the pandemic in 2020. Attacks on the software supply chain are growing exponentially, notably addressing technologies that offer more vulnerabilities to be exploited, such as the Internet of Things (IoT) and 5G.

Cybersecurity has emerged, in less than a decade, as one of the most significant challenges for the global economy. Globally, it is estimated that the investments in this sector have reached over than 119 billion € per year and that it has exceeded 823 billion €, between 2017 and 2021. By 2030, is expected that global collective spending on cybersecurity overcome 356 billion €.

Studies point out the biggest challenges for cybersecurity: complex and fragmented policies and norms, new approaches to mitigate incidents, difficulty in locating cyber criminals, ambiguous responsibility. Under-investment is also considered a challenge, as security, in general, is not considered as a part of technological innovations and so the investment is not always done properly and also does not receive the investments necessary to develop emerging technologies safely.

The lack of experience and in the number of professionals in the sector is another reported problem. It is estimated that worldwide, companies and institutions face a shortage of cybersecurity professionals of more than 3 million, a number almost similar to the total number of people working in the sector, around 3.5 million. However, the challenge here is twofold: attracting more professionals to retrain in cybersecurity and ensuring that curricula allow students and interns to keep up with ever-changing threats.

Future Series: Cybersecurity, emerging technology and systemic risk, 2020
A. Pipikaite, M. Barrachin, S. Crawford, "These are the top cybersecurity challenges of 2021," World Economic Forum. 2021.
P. Mee, C. Chandrasekhar, "Cybersecurity is too big a job for governments or business to handle alone," World Economic Forum. 2021.

Image source: https://pixabay.com/pt

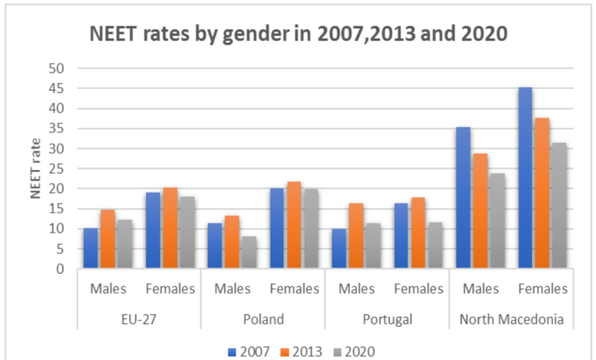
Did you know that...

The NEET concept has been widely used to designate individuals who, at some point in their lives, are not formally in education, employment or training, being therefore an essential definition in the study of the transition of young people to the labor market, highlighting some barriers and challenges they often face. However, it reflects the need for a careful look on the part of policy makers in order to help develop the right mechanisms for promoting education, employment, training and social inclusion.

This is a designation that is often linked to crisis, as there are young people who are quite vulnerable to economic cycles. Evidence from the previous financial recession may confirm this theory as there has been an increase in NEET rates in all Member States except Austria, Germany and Luxembourg. These effects, besides to being immediate, are persistent and perpetuate inequalities, hence this group requires special attention from policy makers.

On the one hand, the 2008-2013 crisis exposed this group's weaknesses to economic recessions when compared to other groups, the pandemic crisis may further underline these effects. During the pandemic crisis, youth unemployment soared to over 40% in many EU countries.

Likewise, the NEET rate has reached a historic level of 16% in the total population aged 15-29 in the EU, such that estimates suggest that the economic losses that may ensue could be around € 153 billion per year. Many questions can be asked here, but recently Eurofound developed a questionnaire to more than 85000 citizens where it tries to find some reasons for such records. The results suggest that there is no doubt that young people in Europe are fighting the crisis by describing low levels of mental well-being and high levels of loneliness when compared to other age groups. This is compounded by the loss of jobs, reduced working time and a feeling of insecurity in relation to their future professionals and financiers.



NEET rates by gender in the countries partners of MCOG project. Source: Exploring the alignment of entrepreneurial determinants and NEET – Overview across European countries.

In the European Union, several initiatives and programs were developed driven to this vulnerable group, and in this context, the Erasmus + project "My Career Our Game" (MCOG), that brings together the University of Aveiro and partners from Poland and Macedonia, aims at preventing young people to become NEETs, actin in secondary and higher education. The project has recently developed a methodology to support early career guidance. The proposed model is based on positive practices from several countries in Europe, but also in experiences of the three partners of the project: Macedonia, Poland and Portugal, namely through the University of Aveiro.

The proposed "Innovative model of face-to-face career guidance" involves 10 steps in order to prepare young people to start their professional life at their most appropriate level and area in order to be prepared for decision making regarding their education, training and career.

The model and other details of the work being developed have been now released as a new book publication that is available here:

⇒ https://www.epi.org.pl/files/projects/2021/my-career-our-game/mcog_io1_publication.pdf

⇒ https://issuu.com/epipoland/docs/mcog_io1_publication

Labour Observatory News

The main purpose of the Aveiro Employment Observatory is to contribute to equipping the territory with a new generation of talent, which allows to increase local companies, improving the quality of life of its citizens.

Since 2019 and 2020, the Observatory has done extensive research, in tight collaboration with local stakeholders, collecting data from representatives in the sectors of Industry, ICT and Tourism and Services. This work allowed for the identification of qualification priorities, associated with the new challenges of digital transformation and the needs of the local labor market. This wok of diagnosis involved several research activities including firstly the elaboration of a map of the stakeholders, and the conduction of workshops, questionnaires and interviews with local actors.

In pursuing this mission, the Observatory, in the context of the project Aveiro STEAM City is also in charge of the task of proposing pilot programs that respond to the challenges of the region's business context. The development of the training programs builds on a prospective view of the priorities of Aveiro, and the identified needs for qualification.

As such, and following the planned activities defined in the project Aveiro STEAM City the Observatory will now present, from June onwards, several Awareness Workshops that aim to raise awareness about the new needs for education and training motivated by the digital transformation. The Awareness Workshops will be followed by 4 Pilot Training Programs that are open to free attendance. The Awareness Workshops will take place both in face to face format and online. They are targeted to young graduates and professionals and have the purpose of presenting information about the forthcoming training programs. Further information and updated will be released in the page and in the social media of the Observatory. Stay tunned!

Fonte da imagem: https://pixabay.com/pt

To learn more about the Aveiro Labour Observatory: http://observatoriodoemprego.web.ua.pt/

To learn more about the Urban Innovative Actions: https://www.uia-initiative.eu/en/uia-cities/aveiro

To learn more about the project: https://www.aveirotechcity.pt/pt/atividades/observatorio-do-emprego

Contatos

Observatório do Emprego
observatoriodoemprego@ua.pt
@observatoriodoemprego

Câmara Municipal de Aveiro
www.cm-aveiro.pt

Universidade de Aveiro
www.ua.pt

Inovaria
www.inova-ria.pt

Main Urban Authority

Delivery Partners

Funding