

A stylized graphic of a human head profile in white, facing right. Inside the head, there are four vertical bars of different colors: yellow, white, yellow, and purple. Above these bars are four circles of different colors: red, green, orange, and red. A thick, curved line in red and green arches over the top of the head. The background is light gray.

ISSN 2184-7894

The pandemic has accelerated the implementation of new digital technologies, fostering the digitization due to connectivity and computing, since, overnight, the volume online of activities related to working, studying and selling has increased at an unprecedented pace.

Moreover, the adoption of 5G technology, acknowledged for enabling high speed of communication, is identified by specialists as a factor which will be determinant for the recovery of the economy after COVID-19, allowing for growth in productivity and added value of products and services.

The 5G Outlook Series Report of 2021 from World Economic Forum highlighted several activities that have driven the use of the 5G: in healthcare (490% increase in emergency care consultations via telemedicine); lack of socialization (75% increase in online games); and in retail (74% increase in online transactions).

By the end of 2021, it is estimated that, worldwide, the number of 5G mobile internet subscriptions will reach 580 million and by 2026, this number will reach 3.5 billion subscriptions. Furthermore, the connectivity and speed will grow as the 5G infrastructure evolves.

Additionally, the success of the digital transformation, led by the 5G, will be related to the digitizing all sectors of the economy, creating open and diverse ecosystems for collaborative value creation. In addition, the expansion in bandwidth, reliability and streaming speeds due the 5G will enable companies to use all the technological resources based on data, such as internet of things, artificial intelligence (AI) and machine learning.

The Industrial Internet of Things (IIoT) and Industry 4.0 require stable maintenance of stable and high-volume data streams as devices communicate with each other. And 5G will reliably connect everyone and everything with unlimited storage and cloud processing, increasing efficiency and driving innovation.

Devices, autonomous vehicles, industrial robotics on the factory floor are examples of equipment that needs constant communication with other devices to make critical decisions instantly. The speed, security and reliability of these connections could be enhanced by joining 5G and IoT.

Therefore, a super-fast internet will generate high sales values and maintain millions of jobs. As a result, it is estimated that by 2035, smart connectivity, enabled by 5G, will generate over €11 billion of global economic value.



Bandaru, N. (2021). "How 5G Is Changing The Way We Do Business" Forbes
Amon, C. (2021). "How superfast internet will democratise computing and help close the digital divide". World Economic Forum
Di Campli, O. (2021) "More than speed: 5G could become the next big economic driver" World Economic Forum
Ekholm, B. (2021). "COVID-19 showed the importance of 5G for the economy and the environment" World Economic Forum
Image from Pixabay.

Since April of 2021 a record number of resignations was registered. According to a report by McKinsey & Company, in the United States this number exceeds 19 million employees. Other results of the report indicate that 40% of the employees surveyed, in Australia, Canada, Singapore, United States and United Kingdom, consider resigning within the next 3 to 6 months, while 18% say they are sure. Sectors with greatest risk of losing employees are health, leisure and hotels. However, even among educators, 33% of the interviewed showed interest in giving up their profession. This scenario has caused huge difficulties for organizations, namely by understanding the reasons for these resignations.

However, many companies have disregarded this identification and evaluation phase regarding the causes of employee dismissals, going directly to faster solutions, which even if well-intentioned, but which end up not having the desired effect. And for employees there is the feeling of lack of appreciation, of being a simple transaction and that their needs will not be heard by organizations. In addition to not investing in more capable and experienced employees, many employers faced difficulties in creating environments with more autonomy and flexibility. This has led professionals to give up the traditional and full-time forms of work.

The pandemic period showed that employees have been looking for more humane conditions at the workplace. Many employees are physically and mentally exhausted and need a new perspective and purpose. More than salaries and benefits, feeling valued and having personal and interpersonal connections with co-workers and managers has been more appreciated.

However, this is not an easy task as it requires both organizations and their leaders to be willing to truly understand the needs of their employees and to change. This requires a deep empathy, namely from managers, to understand the real needs of employees and create more flexible, connected and valued environments. To do so, managers will need to rethink their leadership model, in addition to valuing their coaching and mentoring skills.

Therefore, organizations that have sought to understand the wishes of their employees and specially to learn from this high output will be those with the greatest advantage in attracting and retaining talent. To help meet these needs, in a constantly changing job market, the Aveiro Labour Observatory works to identify, attract and retain talent in the Aveiro.



De Smet, A., Dowling, B., Marino, Baldocchi, M., Schaninger, B. (2021)
 'Great Attrition' or 'Great Attraction'? The choice is yours", McKinsey
 & Company

Image from Pizabav

Did you know...

This November, the UN held the 26th annual climate summit - COP26, in Glasgow, UK, where world leaders and representatives from different sectors discussed measures to keep the average global warming below 1.5°C. And one of the possibilities is to reduce the use of coal for energy generation. In this sense, clean energies, such as wind and solar, may contribute to reducing emissions to zero.

A report of 2021 by EY-Parthenon Consulting points out that approximately 13.000 renewable energy projects, from offshore wind farms in Great Britain to floating solar plants in Vietnam, in nearly 50 countries are waiting for funding. These projects could generate up to 10 million green jobs. However, if we include associated systems such as energy storage, transmission and distribution, the generation of jobs would be greater.

In this sense, the occupations to be created range from tasks with less qualifications in civil construction, installation and manufacturing to activities that require higher qualification such as engineering and project management. Therefore, investing in green energy could help create jobs in economic growth, supplying about 90% of the job losses that occurred with the pandemic.

In a study developed by University College London, occupations in the clean energy sector grew from 2015 to 2020 in the United States. Until 2019, job creation was 10 times greater than that of the fossil fuel industry.

In this context, Portugal deactivated its last coal plant, Central do Pego, becoming the fourth country in the European Union to no longer use coal as a source of generation. 9 years ahead of the 2030 target. Even with an energy supply of 60 to 70% derived from renewable sources, Portugal still depends heavily on imported fossil fuels to meet global energy needs. As the studies point out, the rapid investment in renewables would be the best solution for the suppression of coal.

However, many employees still do not have the necessary skills to develop activities in the clean technology sector and its supply chains. Therefore, it will be essential to develop the local infrastructure and provide the necessary training to develop these skills.



UK Online Report Business News (2021). "Portugal becomes the fourth EU country to stop using coal to generate electricity". Euronews with Reuters

Lock, H. (2021). "Future Jobs: 6 Green Careers Set to Grow in the Next Decade", Global Citizen

Rowling, M. (2021) "Clean energy investment could create 10 million green jobs" World Economic Forum and Reuters

Image from Pixabay.

Educadores digitais e o ensino de competências digitais

The restrictions of the pandemic had significant effects on the labour market and the education system, due the suppression of jobs and interruption of the school year. In addition, generate uncertainties regarding the recovery of these sectors.

However, what is known is schools and universities will have to reinvent teaching methods. Overnight classrooms became virtual, or hybrid. And teachers and students had to quickly learn how to use new digital tools. Particularly at a time when the teaching of digital skills is losing interest. For example, half of high schools in the United States do not offer a single course related to computer science. Which ends up widening the gender gap as well. Over the years of study, the number of students studying computer science is decreasing.

In one hand, the fast evolution of technological innovations has deepened the gap in digital skills for companies, on the other hand, it has increased the risk of students falling behind and not being able to keep up with the pace of transformations and the necessary skills. However, the most important thing is to invest in educators.

Four ways to help improve the skills of the digital educator include: (i) increasing their recognition in society by becoming central; (ii) develop strategies focused on STEM, technology and digital equity in accordance with the framework of the United Nations Sustainable Development Goals; (iii) structuring partnerships and investments to expand training programs and (iv) involvement with multilateral initiatives that promote the SDG 4 whose focus is the promotion of quality inclusive and equitable education for all, namely seeking to measure the percentage of young people or adults who have achieved at least a minimum level of proficiency in digital literacy skills.

Thus, such measures may help educators to expand their fluency in digital transformations, cloud computing, artificial intelligence, augmented and virtual reality, machine learning, robotics and other innovations in order to modernize their classes and share and help their students to develop their digital skills.

Therefore, it is necessary to understand what skills students need to acquire, in addition to combining education with the latest training trends, and with lifelong learning. It is important to understand that technological advances can generate greater equity in education, along with teachers with the necessary digital skills.



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>

Would you like to receive more information? Register and receive the newsletters: observatoriodoemprego@ua.pt

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

AVEIRO
CÂMARA MUNICIPAL

AVEIRO
STEAM CITY