

THE VIRTUAL REALITY OF WORKING FROM HOME

Digital communication tools are supporting, enhancing and facilitating more people to work from home, while innovative companies are leveraging more advanced technologies – such as the Internet of Things (IoT) and 3D printing – to deal with the frontline challenges of the pandemic.

While fear has been mounting in the debate around new technologies and the implications for the future of work, the coronavirus outbreak, however, has also unveiled some real positives of technological advances.

Following the escalation in global efforts to contain the coronavirus pandemic, working from home has become the norm for those who have an office job. Back in 2019, for many of us, working meant going into the office.

And back in 2015, the share of workers who frequently used ICT to work from home was less than six per cent of the total working population, with an even split between employees and self-employed, according to the findings of the European Working Conditions Survey by Eurofound*.

Things then changed dramatically in the space of a few weeks, with many companies in many countries now having now rolled out mandatory remote working. As the coronavirus crisis deepened, governments and the health authorities urged companies to facilitate working from home to protect the health and wellbeing of their employees.

In Italy – the European country with the highest Covid-19 death toll – the government introduced legislation to simplify the procedures for employers to implement smart or ‘agile’ working, which, in the current context, was essentially working from home.

VIRTUAL REALITY IS NEW OFFICE

With working from home becoming the norm during the pandemic some technologies have may fulfilled their hype and proved to be useful tools. Virtual and augmented reality are already being used effectively in training, but they could have a

powerful impact on remote working by supporting communication and enhancing teamwork.

According to Niall Campion and Pat O’Connor, founders of VRAI (an Irish start-up specialising in virtual and augmented reality) the technology is mature enough to be applied to new areas beyond training and on-the-job learning.

They noted that by creating a virtual representation of the real world, virtual reality can replicate the experience of being in the office with colleagues or a meeting room with clients.

“Working in a simulated collaborative workspace can make employees feel more engaged in their work and part of a team, helping to overcome that sense of isolation and alienation that may arise when working

remotely.”

Multinational companies like Mattel and Ford already use virtual reality across their global workforce for collaborative work.

LIVESAVING DEVICES

Innovative European companies are also leveraging digital technologies such as 3D printing and IoT to come up with solutions to deal with the fallout of the pandemic.

Issinova, located in the north of Italy, has shown how 3D printing can be mobilised quickly, by fast-tracking the production of 3D-printed replacement respiratory valves for the local hospital in Brescia, devices that could not be sourced otherwise due to the crisis having disrupted the supply chain.

To aid the prevention of virus



transmission, Belgium-based Materialis designed 3D-printed hands-free door-openers, which are easy to mount on existing door handles. The company has also made the digital files available for others to 3D-print the gadgets.

IoT solutions also have an important role to play in containing the virus. Using the data-analytics capabilities of IoT, Irish company Taoglas has developed a Crowd Insights platform to monitor and detect breaches of social-distancing limits in real time both indoors and outdoors. One Irish hospital is currently using the technology.

Experts see wider applications of IoT, such as providing early warning systems in airports to detect whether passengers have symptoms associated with infectious diseases.

ONE POSITIVE LEGACY

The coronavirus outbreak and the measures taken to contain it are likely to result in permanent changes to life in Europe, including working life.

Once the medical and health crises have been overcome, there will be many lessons to carry forward in our daily lives, including interactions with friends, families and colleagues. It may be that our fears of the disruptive potential of technologies are tempered and that working from home becomes commonplace.

If virtual reality proves to be the powerful tools to enhance teamwork and communication across dispersed employees, it may be embraced by companies large and small.

The greening potential of this technology may become more apparent than ever. And both 3D printing and IoT, if they have been put them to good use, may also be recognised as allies in the future of work. While disease may defy control, choices about technology are in our hands.

**Eurofound is the European Foundation for the Improvement of Living and Working Conditions in Europe, based in Loughlinstown, Co. Dublin. For regular updates visit www.eurofound.europa.eu/*

For further information on digital transformation in the workplace during Covid-19 visit <https://www.eurofound.europa.eu/topic/covid-19>

