Committed to Europe

Digital skills for EU growth and competitiveness

In a nutshell

While the EU economy was greatly affected by the COVID-19 virus, the digital skills challenge has become even more central to the life of individuals, industry and society as a whole. Many have had to re-adjust their lives to work at home, and continue the education of their children, as well as turning to the internet for keeping in touch, entertainment or exercise.

In order to fully benefit from the ongoing digital transformation, developing digital acumen in our society as well as re-shaping the way we cultivate skills among workers, citizens or researchers for technological excellence and digital entrepreneurship are key steps Europe cannot afford to miss. The European Skills Agenda launched by the European Commission in July 2020 foresees the need over the next 5 years for a 25% increase in the number of adults with basic digital skills to 230 million people. Specialised skills will also be needed in new fields (e.g. artificial intelligence or big data). No-one should be left behind.

This paper looks at current proposals to increase digital skills and inclusion with reference to lessons learned by Orange during its transformation from a telecom operator to a truly digital company and through its involvement as a partner in civil society, and as a 'digital coach'. For Orange, digital inclusion means simplifying access to connectivity and planning tomorrow's networks, creating and developing learning initiatives, supporting entrepreneurships and start-ups, as well as promoting innovation.

Enabling the digitisation of European business through a digitally-skilled workforce

We have to facilitate the spread of digital skills, so that everyone can adapt to and benefit from digitisation. Their development should be part of early education – a Member State's competence – but should also be a cornerstone of lifelong learning, to ensure Europe's workforce adapts to the evolving needs of the wider economy.

European Institutions can facilitate digital take-up by adding clearer structure to the way skills are managed, in particular by: encouraging the provision of training resources and commitments; ensuring greater consistency of training and recognition of that through, for example, certification schemes throughout the Union. This ambition is reflected in the Commission's latest set of initiatives which comprises plans for a European Education Area[1] and a revised Digital Education Plan[2] (supporting schools to upskill teachers, adapting curricula and teaching methods, and supporting children to develop basic digital skills and competences from an early age).

[1] https://ec.europa.eu/education/education-in-the-eu/european-education-area_en
[2] https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan_en

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Beyond training and mobility considerations, digital tools can also help transform skill-management in a workforce, improving employee's empowerment to manage their skills and job opportunities.
For instance, Orange has developed new innovative HR tools:

- Under the '*My Skills'* initiative, staff can assess their skills and learn how to develop them. The tool enables employees to opt-in for specific training programmes and HR to plan resources;
- New career paths have been designed, allowing employees to broaden their potential through HR processes that favour mobility across divisions - but also across specialties.

Digital excellence: developing specialised skills & appetite for digital

Promoting coding at all levels of education broadens career opportunities and helps digital integration by turning digital consumers into digital creators/transformers. Our #SuperCoders workshops, which introduce young people to the basics of coding, have been running since 2014 and are aimed at 9-13 year olds. They aim to balance the numbers of boys and girls taking part, and are run by Orange employees who have volunteered their time to coach more than 30,000 young people across 20 countries since the programme started. We welcome the fact that coding is now part of the school curriculum in a number of European countries. This coding knowledge could boost the app economy and empower aspiring digital entrepreneurs to start developing inventive platforms or services in Europe.

The Orange Foundation[3] also works for the professional integration of young people through "digital learning by doing" in digital manufacturing laboratories. It supports 131 Solidarity FabLabs (98 of which are in Europe) in 21 countries and has trained more than 77,000 young people since 2014.
With the Women's Digital Centers "Maisons Digitales" programme, the Orange Foundation is also supporting the economic empowerment of women in difficulty through digital training in partnership with NGOs and associations. Since 2015, more than 40,000 women have been trained in digital skills in 23 countries. There are 150 "Maisons Digitales" in mainland France and overseas, and 15 in 4 other European countries: Spain, Romania, Poland and the Republic of Moldova.

Europe's digitalisation should not be limited to the adoption of digital solutions. Indeed, a European Digital Single Market needs the skills to innovate in digital technologies. This means developing the skills needed for specific roles such as software engineers and programmers, but also data scientists to explore opportunities in a data-driven economy, as well as researchers and developers in artificial intelligence. Cybersecurity experts will also be needed to protect assets which have become so vital to the functioning of our economy and civil infrastructure.

The example of cybersecurity

These specialised skills are of particular importance when it comes to cybersecurity, as managing risk in an interconnected world has become a central concern. Telecom operators play a key role on these issues as networks are amongst the targets for attacks, in particular 'Denial-of-Service' (DoS) attacks. Moving from a prevention strategy to a cyber risk-management strategy requires the continuous development of tools and expertise to secure infrastructure and supervise, detect, defend and prevent. In this context, '*Orange cyberdefense'* is our division dedicated to the handling of cyber-risks and concentrating know-how, skills and talents in a single organisation.

[3] Orange Foundation (fondationorange.com)

Technological excellence, entrepreneurship and beyond

In view of the benefits, promoting the development of specialised skills should be a policy priority at European level. For companies such as Orange, it is clearly of general interest to see the potential of European talents being developed and unleashed. But supporting the creation of startups requires first and foremost developing entrepreneurial skills. The ambitious goals enshrined in the Entrepreneurship 2020 Action Plan, aiming to «revolutionise the culture of entrepreneurship in Europe», could be greatly strengthened with an added digital perspective. Improved links between schools and private/public bodies would also ensure that all partners keep up with the latest evolutions.

Paving the way to digital inclusion: digital skills for all

Europe cannot face all its future challenges unless digital tools are widely adopted. A major target for policy makers should therefore be to ensure that all citizens fully benefit from involvement in the economy and society, via digital means.

With an ageing society, our continent cannot afford to miss the digital inclusion of its older population. Recent studies reveal an increase in the uptake of digital solutions by older people, which is very good news considering that digital tools can make their lives easier. This has been highlighted by the COVID-19 crisis where technology has allowed people to keep in touch with their relatives and enabled them to have virtual consultations with their doctors or use technology to facilitate health monitoring.

Orange is also trying to address the gender imbalance in the world of technology. In France, we partner with the Science Factor competition, which promotes technical and scientific projects from mixed teams managed by girls. This initiative aims to inspire school and college students to think about a career in a scientific/computing field.

Owing to its primary activity of connecting communities, Orange is well-placed to foster digital inclusion and literacy; which is one of the core activities of the *Orange Foundation*. The other important factor in digital inclusion is to use digital tools to provide more inclusive education services, as technology can greatly reduce barriers to education and allow a more flexible and creative way of learning.

Massive Open Online Course (MOOC) associated with on-site classroom teaching (called ‘blended learning’) is a perfect way to achieve this. These types of courses reach a greater audience, with individuals benefiting from a tailored-made curriculum offering the capacity to learn at their own pace. It has become very popular and many platforms, including highly ranked universities or public bodies are now proposing MOOCs, granting them the same importance as on-site traditional courses. It is noticeable that during the pandemic period, cultural MOOC usage exploded.

Upskilling beyond Europe

With the “African Digital School”, Orange supports the democratisation of digital uses across the African continent to promote the start-up ecosystem and new sectors of activity that will generate employment and therefore accelerate socio-economic growth. Offering online courses, an introduction to digital professions, and teacher training for new technologies, the Group has several partnerships in place to enable everyone to acquire new skills. Thanks to the “Ecoles Numériques” programme, 1,000 schools in Africa and the Middle East are now equipped with educational tools provided by the Orange Foundation[4]. Schools that previously had no internet access or resources beyond a simple blackboard to support the teacher can now access a

[4] Botswana, Côte d’Ivoire, Cameroon, Madagascar, Senegal, Tunisia, Mali, Guinea, Egypt, Jordan, Democratic Republic of the Congo, Burkina Faso, Central African Republic, Liberia

free library of digital educational content on a server that doesn't need an internet connection, a video projector and tablets. More than 350 000 students benefit from this programme.

Orange Digital Centres: developing digital skills and fostering youth employability

With the Orange Digital Centres (ODCs), the Group's commitment to digital inclusion is taking a new step forward. Its objective is to bring together in one free space the various tools to help everyone develop their digital expertise, facilitate access to high added-value jobs and support entrepreneurship.
The ODCs are a new lever to promote digital equality, and we are accelerating their implementation in all of the countries where we operate. To date 4 ODCs have been launched in Africa, and 18 new ones will be launched over the next 3 years in Africa and the Middle East, 13 in the EU, and 1 in Moldova. Forming an international network, these centres will promote large-scale exchanges of experience and expertise. The positive impact of the programme on the development of local economies is arousing the interest of international institutions, as underlined by the partnership with the federally owned enterprise GIZ, operating on behalf of the German Ministry of Economic Cooperation and Development (BMZ), which has accelerated the project's deployment in the Africa and Middle East region by leveraging synergies to help even more young people learn the skills they need to find jobs in the digital sector.

Orange is also supporting universities, with the recent launch of its online training platform "Orange Campus Africa" in partnership with the Virtual University of Senegal (UVS). Hosted in its data centre in Côte d'Ivoire, it was designed to bring together content from renowned partners in education and training in one place. Since the beginning of the health crisis, Orange Middle East & Africa (MEA) has stepped up its e-learning initiatives. From March to June 2020, 15 of its subsidiaries made mobile connections to selected courses provided by international and African partners free of charge. The aim is to offer a platform that would meet the specific needs of African populations, universities and businesses. The advantages of this platform are the adaptation of training to local contexts (cultural, economic, etc.), optimised access via a smartphone, mobile payment in local currencies for additional or premium services (tutoring or certification, for example). The platform also enables universities to monitor their students' progress online, and even to supplement training with virtual classes. This online and classroom teaching is an asset that should help increase the number of students and remove obstacles related to the students' geographical remoteness. Companies can also train their employees using training courses from universities and others (partners, product suppliers, etc...).

Building for the Future

Europe needs digital skills to foster innovation and regain its edge in a competitive world, even more so as we recover from the COVID-19 crisis. Developing digital skills throughout Europe will play a key role in ensuring our future: empowering Europeans with the relevant skills will not only address high unemployment rates but also drive the creation of an innovative digital economy. Orange is trying to play its part by helping everyone learn how to use the right tools, regardless of their age or where they live: teaching young people the basics, raising awareness among teens of the digital risks, helping people find jobs, and supporting professionals in their ways of working
We welcome the fact that Europe is committed to skills development, but it should first and foremost ensure it delivers on its promise to foster collaboration across the EU and link the different existing initiatives. While policy makers at European and national levels can pull many levers, this transformation will be successful only if developed and shared together with companies and citizens.

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