Tallinn Digital Summit
Digital Skills in Europe

The Digital Skills Gap in Europe

Digital technologies are used in many sectors such as farming, healthcare, transport, education, retail, automatics, energy, shipping, logistics, teaching and the information and communications technology industry.

The demand for information and communications technology specialists is growing fast. **In the future, 9 out of 10 jobs will require digital skills**.
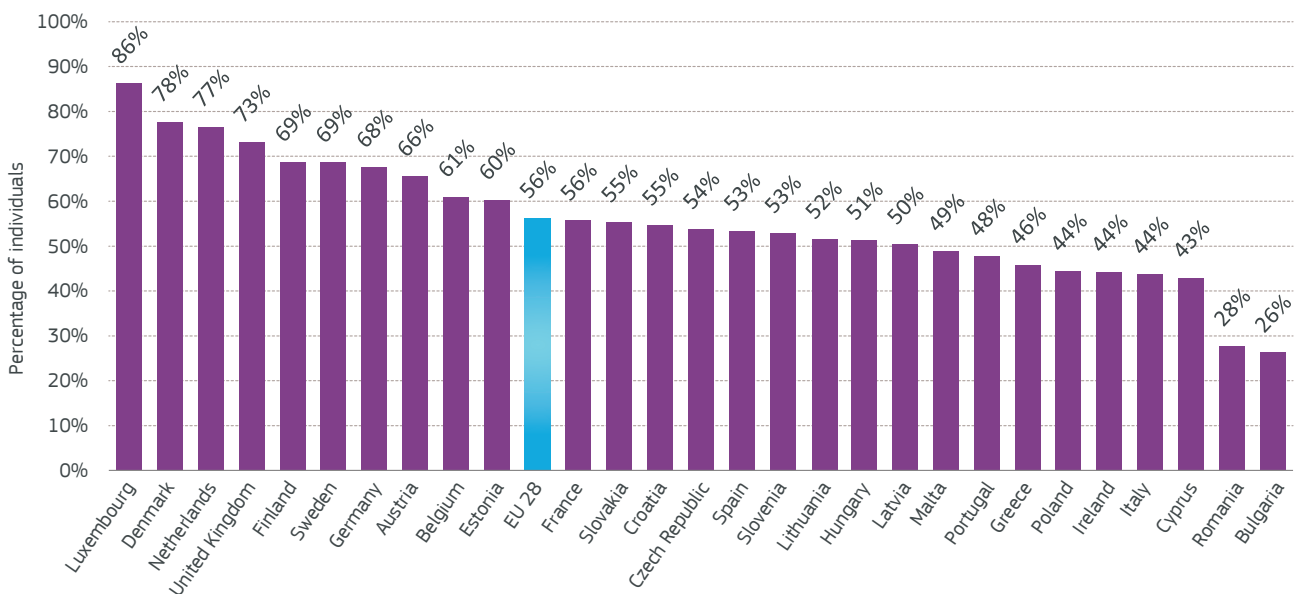
At the same time, 169 million Europeans between 16 and 74 years – 44% – do not have basic digital skills.

According to the latest Digital Society and Economy Index there are significant differences between Member States when it comes to citizens' digital skills.
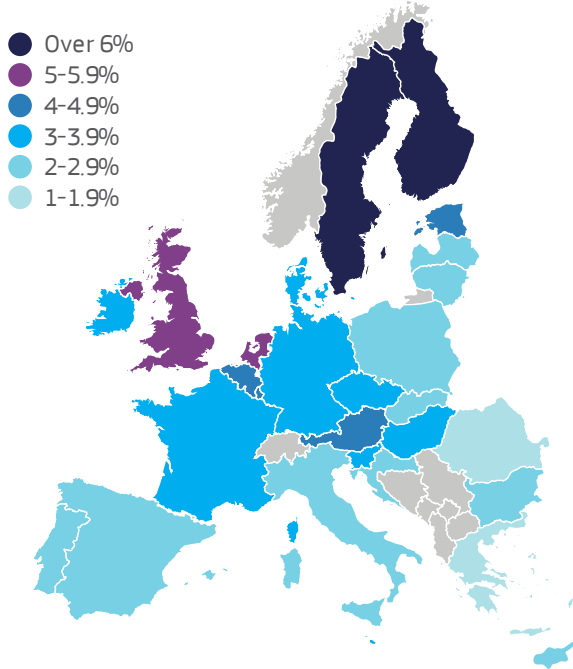
44% of Europeans **do not have basic digital skills**

Basic digital skills in the EU

Bar chart — Percentage of individuals:

Country	%
Luxembourg	86%
Denmark	78%
Netherlands	77%
United Kingdom	73%
Finland	69%
Sweden	69%
Germany	68%
Austria	66%
Belgium	61%
Estonia	60%
EU 28	56%
France	56%
Slovakia	55%
Croatia	55%
Czech Republic	54%
Spain	53%
Slovenia	53%
Lithuania	52%
Hungary	51%
Latvia	50%
Malta	49%
Portugal	48%
Greece	46%
Poland	44%
Ireland	44%
Italy	44%
Cyprus	43%
Romania	28%
Bulgaria	26%

Similarly, the share of highly-skilled information and communications technology (ICT) professionals varies notably between Member States: from 1% of the labour force to over 6%.

ICT specialists in the workforce

Legend:
- Over 6%
- 5-5.9%
- 4-4.9%
- 3-3.9%
- 2-2.9%
- 1-1.9%

The untapped potential

Today, **40%** of companies have difficulties finding ICT specialists

There will be **500,000 unfilled vacancies** for ICT professionals **by 2020**

Equipping people with the right skills

Employees will need to be able to work with sophisticated machines and IT solutions as part of their everyday activities, from car mechanics to doctors and nurses. **Developing skills is primarily the competence of the Member States**. The European Union can support their efforts and has launched several initiatives to advance digital skills in the EU.

Actions by the European Commission

The **Upskilling Pathways Initiative** adopted in 2016, enables adults who did not learn to read, write, count or did not acquire digital skills in school to do so later in life.

7 million

Europeans have been equipped with basic digital skills over the last year

The **Digital Skills and Jobs Coalition** launched in 2016 brings together Member States, companies, social partners, non-profit organisations and education providers to tackle the lack of digital skills in Europe. In less than a year, members of the Coalition have trained more than seven million Europeans.

At the end of 2017, the Commission will launch the **Digital Opportunity Traineeship Programme** which will give up to 6,000 students hands-on experience in fields such as cybersecurity, data analytics, quantum or artificial intelligence as well as programming and software development.

6,000

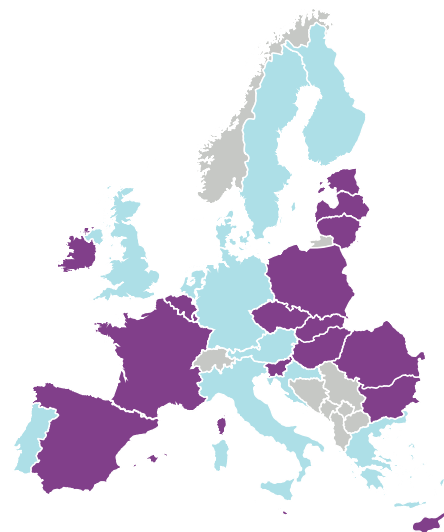students will get work with experience in highly skilled ICT jobs

The Commission also supports the **EU Code Week**, which is a grassroots movement run by volunteers who promote coding. The aim is to make programming more visible and bring motivated coders together. The fifth edition of EU Code Week will take place mid-October. In 2016, more than 970,000 people participated in over 50 countries across Europe.

970,000

people participated in the EU Code Week 2016

Actions by Member States

16 Member States have adopted digital skills strategies aimed at enhancing digital literacy and skills or are in the process of doing so. Countries with comprehensive **national digital skills strategies** include Czech Republic, Estonia, Ireland, Portugal, United Kingdom. Most Member States also have digital strategies for education.

17 Member States have launched a **national Digital Skills and Jobs Coalition**.

Success stories

Connected Schools – connecting 6.5 million Spanish students

The **Connected Schools programme** will provide ultra-fast broadband access (100 Mbit/s and more) to 16,500 primary and secondary schools all over Spain. Every school will also get a high capacity wireless network. 6.5 million students in Spain will benefit from this. Connected Schools is part of the Digital Agenda for Spain, a programme partially financed by the European Regional Development Fund. The overall budget is €330 million.

Coursedot – an IT training marketplace from Bulgaria

Coursedot is a digital marketplace for IT training which works with over 2000 trainers worldwide. The startup from Sofia connects businesses that need to upskill their employees with IT training providers who can deliver the training offline or online. 60% of its business is based in the EU but Coursedot has the ambition to become the biggest marketplace for IT training in the world. The initial investment from the European Investment Fund was €100,000.

What European employers say

"The demand is enormous. Each year we need new profiles, always sharper and even more connected to the trends of the sector: community management, online advertising, development, moderation."

**Le Bon Coin,
France's first ads website**

"We need more people who can code to be able to grow. Although the jobs are there, it's sometimes hard to find people with the right skills."

**Zalando,
leading German fashion e-commerce**

Next steps

During the upcoming **European Cyber Security Month** in October, young people will be supported all over Europe in gaining cyber security skills via training and education. This will encourage also the development of the next generation cybersecurity professionals.

Digital skills will be high on the agenda of the **Social Summit in Gothenburg** on 17 November 2017.

The **Digital Skills and Jobs Coalition conference** will take place on 7 December to launch the **Digital Opportunity Traineeship Initiative**.

The Commission will set up a **high-level group on digital transformation** by the end of 2017 to address the challenges of digitisation and its impact on the labour market.

The 2006 **Recommendation on Key Competences for Lifelong Learning** is being revised to update core competences and include digital skills in education and training curricula across Europe.