Skills for the digital age

Statistics Explained

Data extracted in April 2024
Planned article update: February 2026

" In 2023, 56% of EU citizens aged 16-74 had at least basic digital skills – the highest numbers were reported in the Netherlands (83%) and Finland (82%). "

" In 2023, the share of people with at least basic digital skills in the EU varied between 80% for those with high formal education and 34% for those with no or low formal education. "

" In 2023, more young women than men in the EU had at least basic digital skills. However, for people aged 45 or over, the situation is reversed, and the shares are higher among men – with the gender gap widening in older age groups. "

Digital technologies have become deeply embedded in nearly every aspect of our daily routines, from how we communicate and work, to how we shop, learn, and entertain ourselves. Having digital skills is therefore crucial in today's interconnected world, as it empowers individuals to navigate the digital landscape effectively, access information, and participate in the global economy. This is why the European Union has set out the target that by 2030 at least 80 % of the EU population should have at least basic digital skills. In 2023, 56 % of EU citizens aged 16-74 had at least basic digital skills – with strong variations by socio-demographic characteristics such as age or education level. This article presents recent statistical data on digital skills across the EU and how they vary for different population groups. The statistics come from the EU survey on the use of ICT in households and by individuals .

Measuring digital skills in the EU

The digital skills of individuals are measured via the Digital Skills Indicator (DSI) . The DSI is a composite indicator covering activities in five competence areas :

- information and data literacy,
- communication and collaboration,
- digital content creation,
- problem-solving,
- and safety skills.

Individuals who have performed these activities are assumed to have the corresponding skills – hence the indicator can be considered as a proxy for individuals' digital skills. Exemplary activities include sending e-mails, using spreadsheet software, managing access to personal data, fact checking, or changing software settings. To achieve a level of at least basic overall digital skills, individuals must have performed at least one activity related to each area.

In 2023, 56 % of people aged 16-74 in the EU had at least basic digital skills, 24 percentage points (pp) below the 2030 target set by the European Union. However, two countries have already reached the 80 % goal in 2023: the Netherlands (83 %) and Finland (82 %). On the other hand, the lowest proportions of people with at least basic digital skills in the EU were recorded in Romania (28 %) and Bulgaria (36 %), see Figure 1.

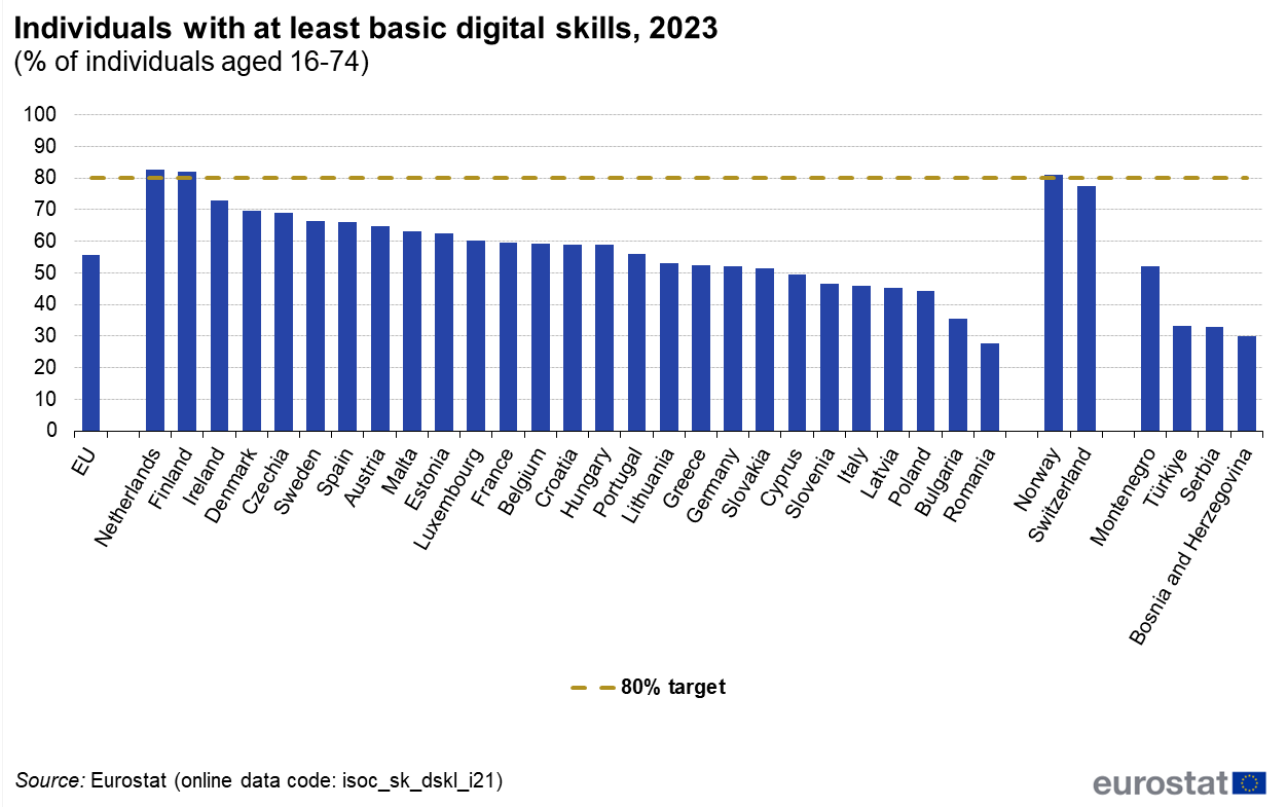

Figure 1: Individuals with at least basic digital skills, by country, 2023 Source: Eurostat (isoc_sk_dskl_i21)

The digital divide

Looking at the level of digital skills in more detail reveals that it is heavily influenced by socio-demographic factors. Only 28 % of people aged 65-74 possessed at least basic digital skills – meanwhile, 70 % of the “digital natives” aged 16-24 did so, as was the case for the age group 25-34, see Figure 2.

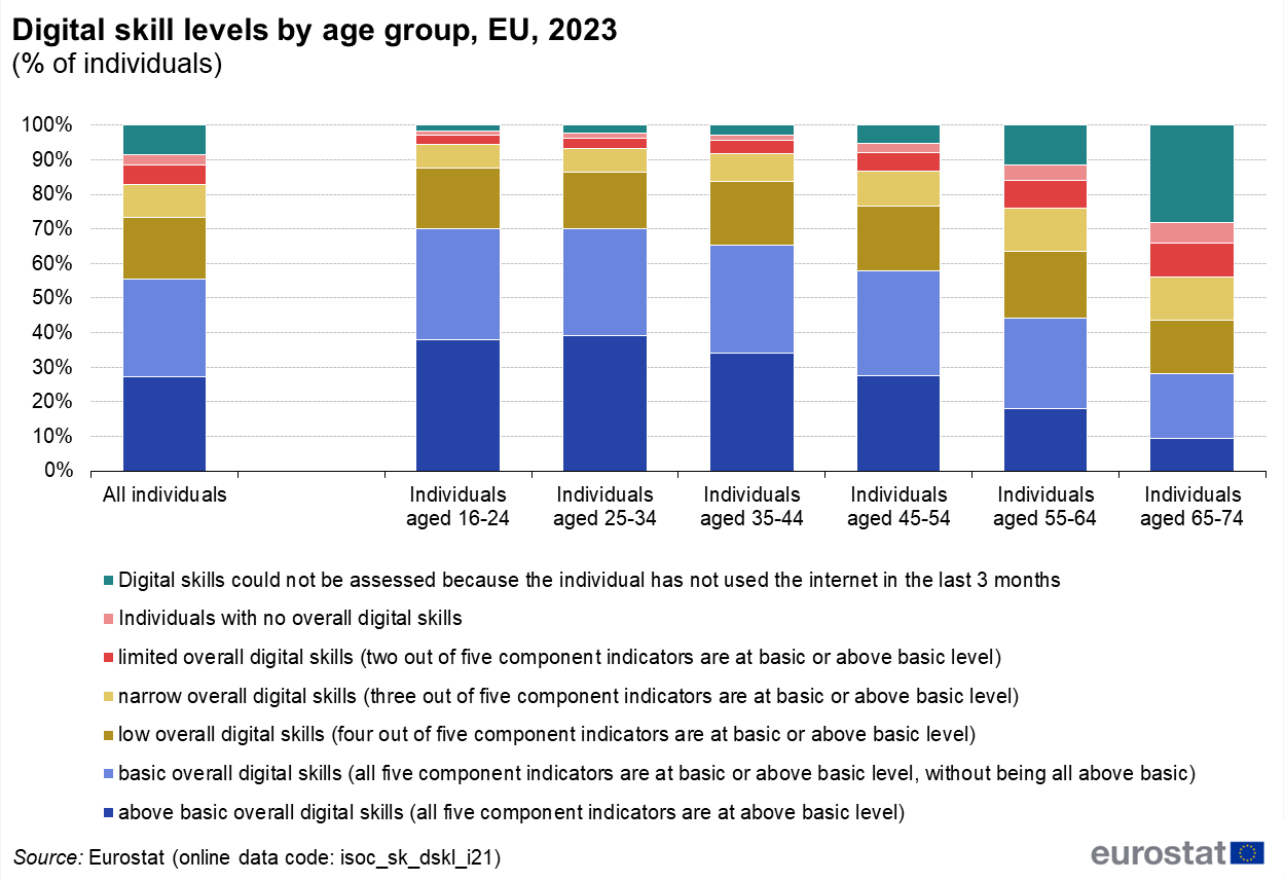

Figure 2: Digital skill levels by age group, EU, 2023 Source: Eurostat (isoc_sk_dskl_i21)

While men had slightly higher digital skills when looking at the overall numbers (57 % with at least basic digital skills, versus 54 % of women), the gender gap varied strongly by age group. In the age groups 16-24, 25-34, and 35-44, more young women had at least basic digital skills than their male counterparts. Among people aged 45 or over, the situation is reversed, and the shares are higher among men – with the gender gap widening in the older age groups, see Figure 3.

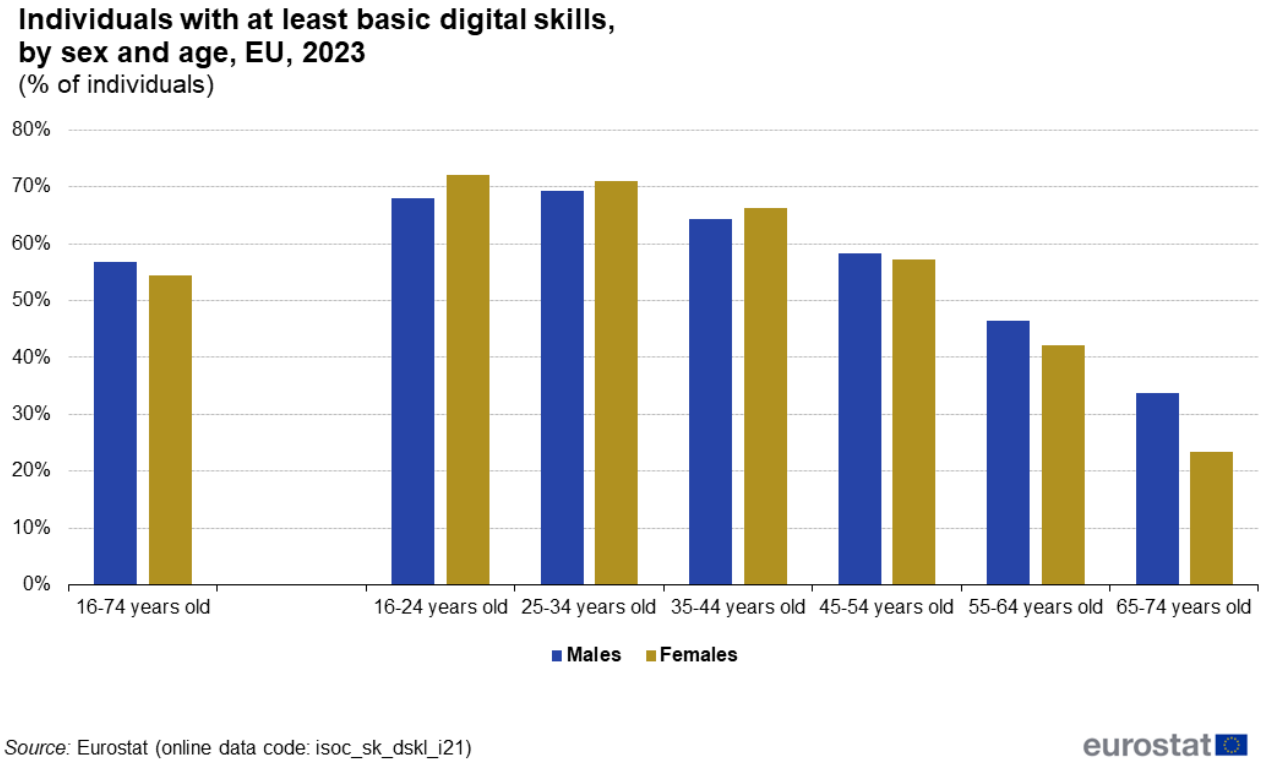

Figure 3: Individuals with at least basic digital skills, by sex and age, EU, 2023 Source: Eurostat (isoc_sk_dskl_i21)

A big impact on individuals' levels of digital skills could also be seen by their level of formal education. The higher the level of formal education attained, the higher the share of people with at least basic digital skills, varying between 80 % for those with high formal education and 34 % for those with no or low formal education. The biggest gaps between those with high or low formal education in the share of people with at least basic digital skills were found in Ireland (74 pp.), Portugal (66 pp.), Greece (63 pp.) and Malta (59 pp.). The smallest gaps were observed in Estonia (12 pp.), Finland (14 pp.) and Lithuania (22 pp.), see Figure 4.

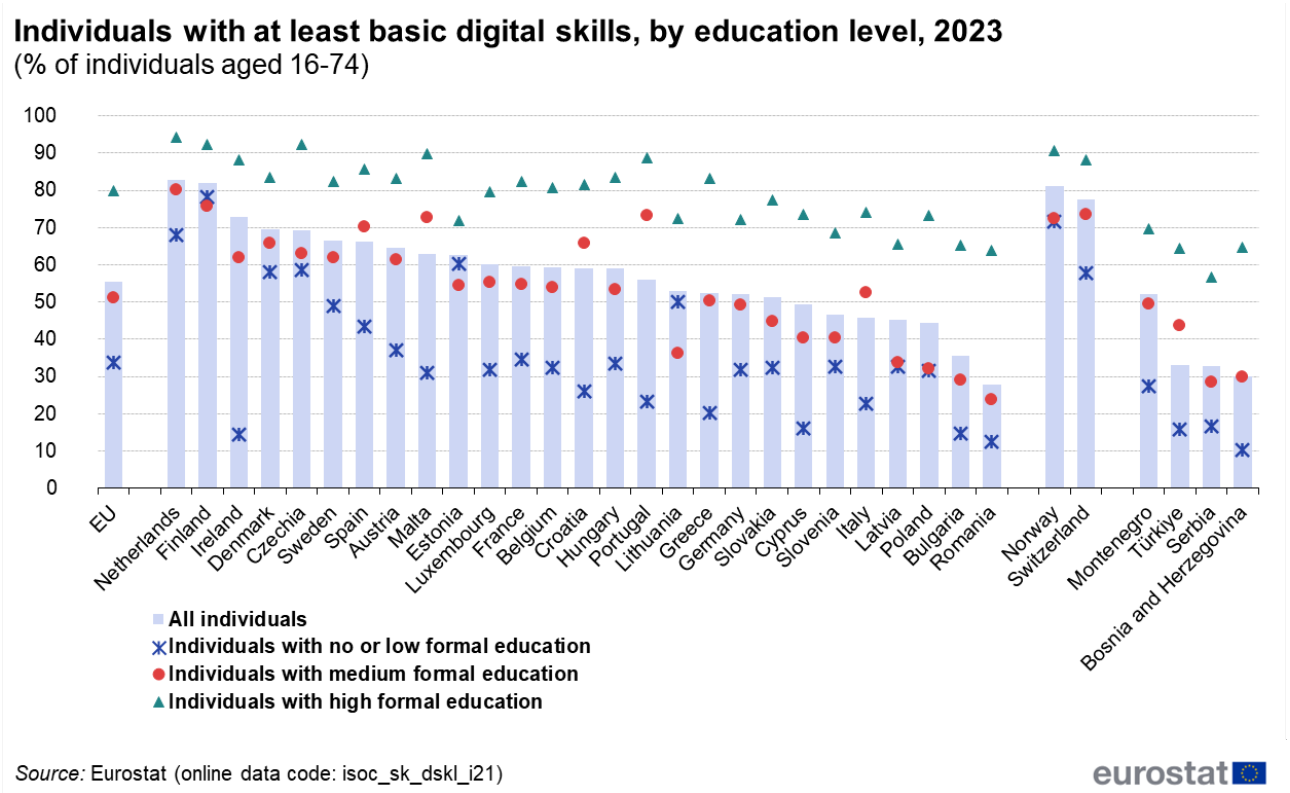

Figure 4: Individuals with at least basic digital skills, by education level, 2023 Source: Eurostat (isoc_sk_dskl_i21)

Source data for tables and graphs

- Digital Skills - Graphs and tables

Data sources

The data presented in this article come from Eurostat's survey on the use of ICT in households and by individuals , which is updated on an annual basis to ensure that the data collected remain relevant. While the questions and areas of interest for the surveys change each year to reflect modern ICT use, there is a core section of the survey which aims to provide stable and continued data collection for several key indicators thereby making analyses over time possible. Currently, information about digital skills is collected every two years. The digital skills indicator was revised in 2021, allowing for only limited comparability to previous iterations. In most EU Member States the surveys are carried out in the second quarter of each year asking about activities in the first quarter of the same year. Within this article statistics that refer to the whole adult population cover those aged 16 to 74 years. The ICT household survey covers households having at least one member in the relevant age group 16 to 74 years old. Currently, no 2023 data for Ireland is available, the EU aggregate has been estimated.

Context

One of the six Commission priorities for the period 2019-2024 is A Europe fit for the digital age . The strategy is built on three pillars: (1) technology that works for the people; (2) a fair and competitive digital economy; and (3) an open, democratic and sustainable society. Furthermore, a very concrete vision of the EU's digital transformation and targets for 2030 were set by the Digital Compass for the EU's Digital Decade, evolving around four cardinal points: skills, digital transformation of businesses, secure and sustainable digital infrastructures, and digitalisation of public services.

See also

- Towards Digital Decade targets for Europe
- Digital Economy and Society

Main tables

- Digital Economy and Society , see:

Digital Skills

ICT users

Database

- Digital Economy and Society

Dedicated section

- Digital Economy and Society

Methodology

- Individuals' level of digital skills (from 2021 onwards) (ESMS metadata file — isoc_sk_dskl_i21)
- ICT usage in households and by individuals (ESMS metadata file — isoc_i)

External links

- Europe's Digital Decade
- DigComp Framework