Use of Internet of Things by individuals

Statistics Explained

Highlights

In 2024, 70% of EU citizens aged 16-74 reported using the Internet of Things: internet-connected devices such as a smart speakers, sleep-trackers or doorbells.

Internet-connected TVs were by far the most commonly used smart (Internet of Things) device in 2024, reported by 58% of Europeans.

Whether smart thermostats that learn your habits, wristbands that count your steps and track your sleep, or doorbells with cameras you can check from your phone, internet-connected devices – often referred to as the Internet of Things (IoT) – are quietly becoming part of everyday life in EU households. But how widespread is their use, and who are the individuals adopting them?

This article presents recent statistical data on the use of internet-connected devices by individuals in the European Union (EU) . It explores how common these technologies are, what purposes they serve, and the reasons why some individuals may choose not to use them.
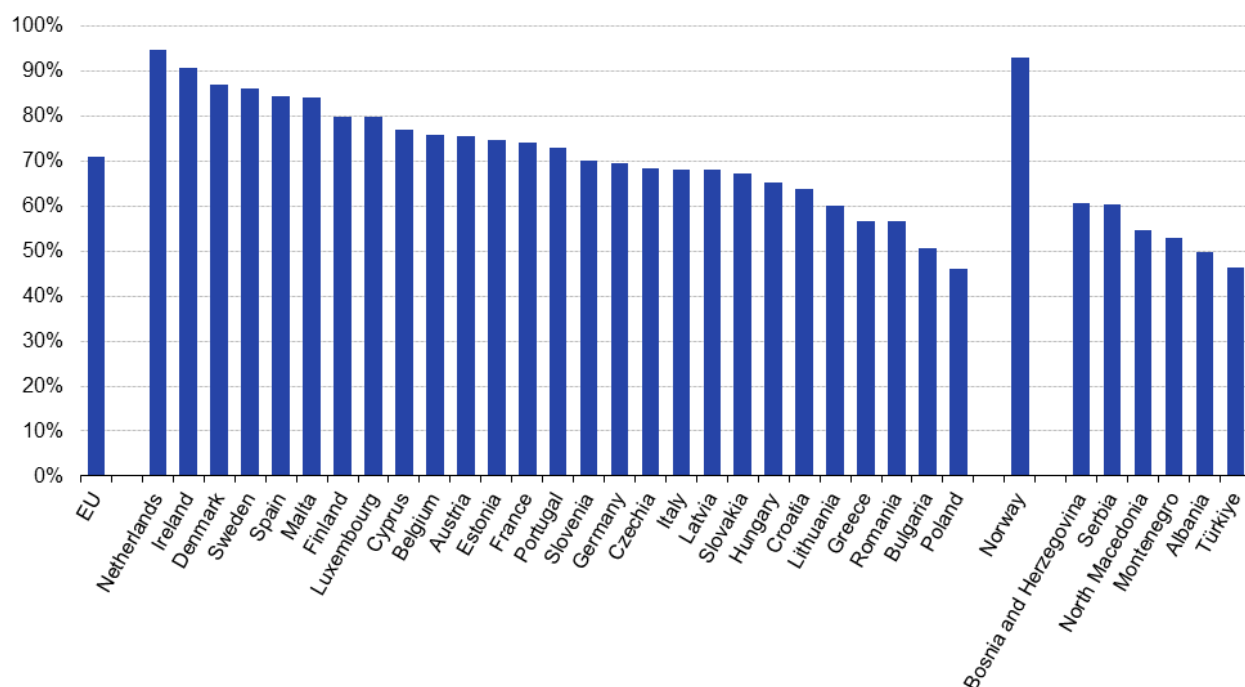
Internet of Things in everyday life: use across EU countries and device types

While most individuals in the EU access the internet primarily through computers or smartphones, many also use other internet-connected devices – those that form part of the Internet of Things. In 2024, 70% of EU citizens aged 16 to 74 reported using at least one such device.

However, the share of individuals using these devices varied considerably between EU countries , ranging from 95% in the Netherlands to 46% in Poland (see Figure 1).

Use of internet-connected devices in the last 3 months, 2024
(% of individuals aged 16-74)

Source: Eurostat (online data code: isoc_iiot_use)

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Figure 1: Use of internet-connected devices in the last 3 months, 2024 Source: Eurostat (isoc_iiot_use)
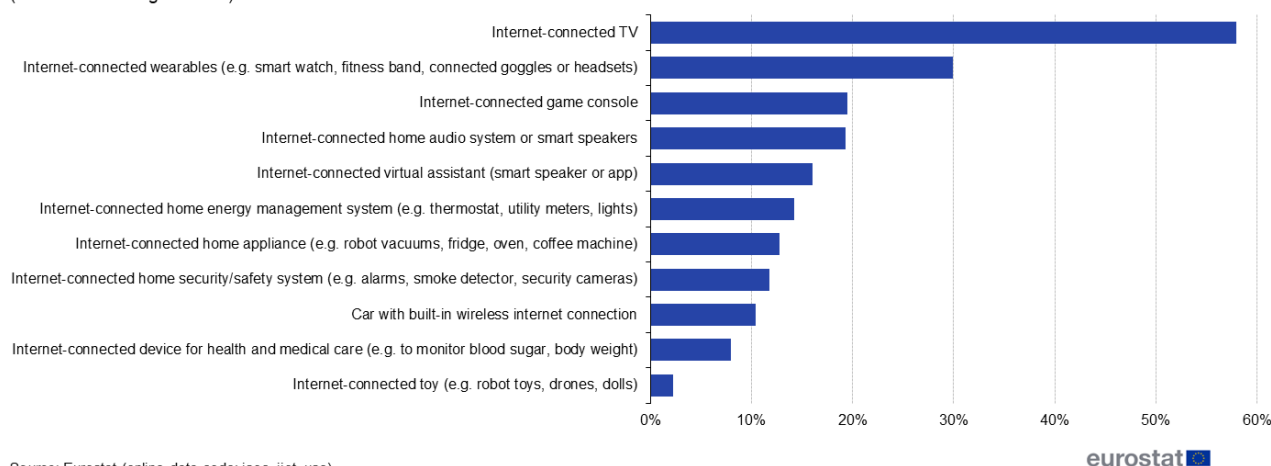
Among the different types of internet-connected devices, entertainment-related ones were used most widely. Internet-connected TVs were by far the most commonly used IoT device in 2024, reported by 58% of individuals in 2024. This was followed by internet-connected wearables such as smartwatches and fitness bands (30%), game consoles (20%), and home audio systems or smart speakers (19%).

Devices related to home automation ("domotics") were used by smaller shares of the population: 14% used an internet-connected home energy management system in 2024, 13% used smart home appliances, and 12% used internet-connected devices for home security.

Less commonly used were internet-connected health devices (8%) and toys (2%), indicating that some categories of IoT devices remain relatively niche (see Figure 2).

Use of internet-connected devices in the last 3 months, EU, 2024
(% of individuals aged 16-74)

Source: Eurostat (online data code: isoc_iiot_use)

Figure 2: Use of internet-connected devices in the last 3 months, EU, 2024 Source: Eurostat (isoc_iiot_use)

How age shapes IoT device use in the EU

Looking more closely at different age groups reveals distinct patterns in how internet-connected devices are used (see Table 1). The use of these devices was highest among younger individuals aged 16 to 24 (those born or brought up during the age of digital technology and so familiar with computers and the internet from an early age) and gradually declined with age. In 2024, 84% of people aged 16 to 24 used at least one internet-connected device, compared with just 45% of those aged 65 to 74.

The youngest age group reported the highest shares of users for all types of entertainment-related devices, such as internet-connected TVs (67%), wearables (40%), game consoles (40%), smart speakers (26%), and virtual assistants (23%).

In contrast, individuals aged 35 to 44 showed the highest usage of devices related to the home, including internet-connected energy management systems (19%), appliances (19%), and home security systems (16%). This age group also recorded the highest use of internet-connected toys (4%) and health-monitoring devices (10%). These patterns undoubtedly reflect a greater likelihood of homeownership, managing a household and living with children, compared with younger age groups.

The highest shares of people using cars with a built-in wireless internet connection were in the age groups 35 to 44, and 45 to 54 years old (both 12%).

Use of internet-connected devices in the last 3 months by age group, EU, 2024
(% of individuals)

	All individuals	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74
any internet-connected device	70.90	83.93	82.00	80.02	73.67	62.70	44.84
Internet-connected TV	57.90	67.19	67.19	67.07	61.53	50.53	34.60
Internet-connected wearables (e.g. smart watch, fitness band, connected goggles or headsets)	29.91	40.19	39.89	37.42	30.75	21.54	11.74
Internet-connected game console	19.51	40.18	29.75	26.41	17.63	6.33	2.33
Internet-connected home audio system or smart speakers	19.31	25.95	24.08	24.50	20.78	13.94	7.64
Internet-connected virtual assistant (smart speaker or app)	16.00	22.79	20.04	19.53	16.48	11.68	6.83
Internet-connected home energy management system (e.g. thermostat, utility meters, lights)	14.22	13.10	17.05	18.50	14.88	12.12	9.04
Internet-connected home appliance (e.g. robot vacuums, fridge, oven, coffee machine)	12.81	14.87	18.11	19.08	12.52	8.07	4.55
Internet-connected home security/safety system (e.g. home alarm system, smoke detector, security cameras)	11.76	9.38	11.77	15.88	13.50	10.86	7.78
Car with built-in wireless internet connection	10.45	9.90	11.10	12.24	12.29	10.13	6.23
Internet-connected device for health and medical care (e.g. for monitoring blood sugar, body weight)	7.93	7.51	9.50	9.76	8.64	7.04	4.78
Internet-connected toy (e.g. robot toys, drones, dolls)	2.28	3.11	3.44	4.09	2.00	0.79	0.48

Source: Eurostat (online data code: isoc_iiot_use)

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Table 1: Use of internet-connected devices in the last 3 months by age group, EU, 2024 Source: Eurostat (isoc_iiot_use)
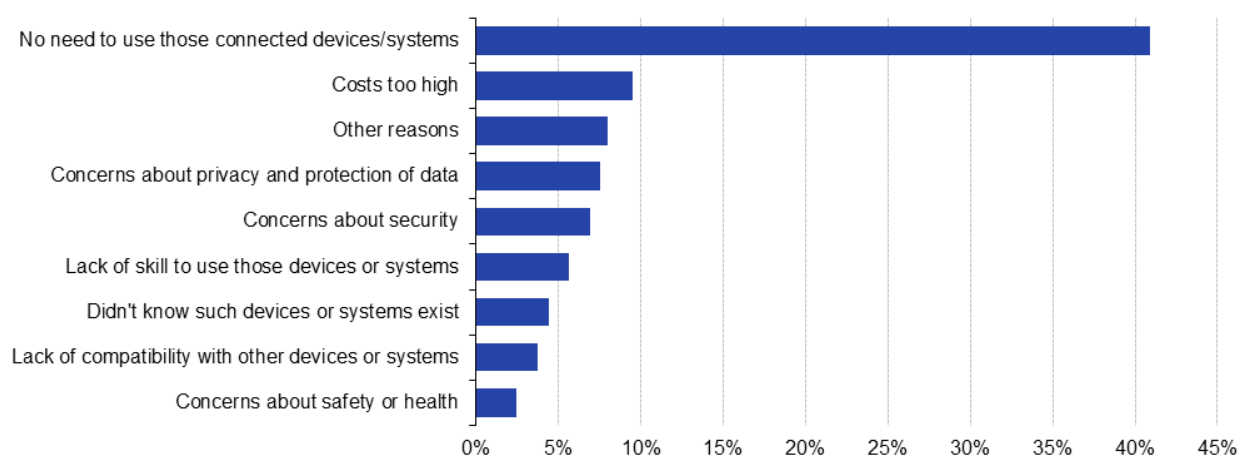
Why some stay offline: reasons for not using IoT devices

Despite the growing popularity of internet-connected devices, a significant proportion of individuals in the EU reported not using these devices in 2024.

In 2024, 41% of individuals aged 16 to 74 who had never used any such devices said they simply did not need them. This reason was cited far more often than other concerns, such as cost (9%), concerns about privacy (8%) or security (7%), or a lack of skills (6%), which were all mentioned by much smaller shares of non-users. This suggests that for many, the choice not to adopt IoT devices is driven primarily by a perceived lack of necessity rather than barriers related to technology or trust (see Figure 3).

Reasons for not using internet-connected devices in the last 3 months, EU, 2024
(% of individuals aged 16-74)

Source: Eurostat (online data code: isoc_iiot_bx)

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Figure 3: Reasons for not using internet-connected devices in the last 3 months, EU, 2024 Source: Eurostat (isoc_iiot_bx)

Source data for tables and graphs

- Use of IoT by individuals: 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 the Internet of Things is collected every 2 years. 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.

Context

The European Commission's digital agenda for the 2024–2029 period focuses on enhancing Europe's digital sovereignty, competitiveness, and security. Key priorities include investing in critical technologies such as artificial intelligence and semiconductors, boosting productivity with digital tech diffusion, promoting digital literacy and skills, and developing robust digital infrastructures to support secure and reliable digital services across the EU. These priorities are outlined in the Commission's 2024–2029
strategic agenda and are supported by substantial investments through initiatives like the Digital Europe Programme.

View this article online at `http://ec.europa.eu/eurostat/statistics-explained/index.php/Use_of_Internet_of_Things_by_individuals`

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- Digital economy and society

Publications

- Digitalisation in Europe - 2025 edition
- Key Figures on Europe - 2025 edition

Methodology

- European compiler's manual for statistics on the use of ICT in households and by individuals, 2024 survey

External links

- Digital Decade

Legislation

- Commission Delegated Regulation (EU) 1797/2023
- Commission Implementing Regulation (EU) 1484/2023

Visualisation

- Digitalisation dashboard