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**STATISTICAL SERVICE  
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**INFORMATION AND COMMUNICATION  
TECHNOLOGIES (ICT) USAGE SURVEY IN  
HOUSEHOLDS AND BY INDIVIDUALS 2022**

**SUMMARY RESULTS**

**Nicosia, December 2022**

**INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT)  
USAGE SURVEY IN HOUSEHOLDS AND BY INDIVIDUALS 2022**

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## **PREFACE**

This report presents the results of the survey ICT Usage in Households and by Individuals 2022. The aim of the survey is to collect data on the access to selected Information and Communication Technologies, the use of the Internet, use of e-Government, e-Commerce, Internet of Things and Green ICT.

The survey, which is co-funded by the European Community, conforms to the Commission Implementing Regulation 2020/1013 specifying the technical items of the data set, establishing the technical formats for transmission of information and specifying the detailed arrangements and content of the quality reports on the organisation of a sample survey in the use of information and communication technologies domain for reference year 2022 pursuant to Regulation (EU) 2019/1700 of the European Parliament and of the Council. The objective of this Regulation is to establish a common framework for the systematic production of Community statistics on the information society.

The report was prepared by Mr. Antreas Charalambous, Statistics Officer, ICT Survey Section under the supervision of Mr. Thomas Gregoriou, Statistics Officer A and Mr. Costas Diamantides, Chief Statistics Officer.

## **A. SURVEY METHODOLOGY**

The survey covers households with at least one member aged 16 – 74 (inclusive) and individuals aged 16 – 74 (inclusive).

The sampling frame used for the selection of the sample was the 2011 Population Census Frame, with reference date the 1st of October 2011. The sampling units are households. Auxiliary information for each household (district, municipality, quarter, address, number of persons, telephone numbers) is also included in the frame. The 2011 Census frame was updated at different time periods with data obtained from the Electricity Authority of Cyprus.

The selection of the sample in urban areas is done by simple random sampling (one-stage sampling). In rural areas, two-stage sampling is used. Villages are the primary sampling units, while households are the secondary sampling units. Neighboring villages with a small number of households are merged in order to create complexes with a minimum number of households. The sample of villages is selected with probability proportional to the size of the village (PPS). Some villages are large and therefore their probability of selection is equal to 1. A simple random sample of households is selected from each village.

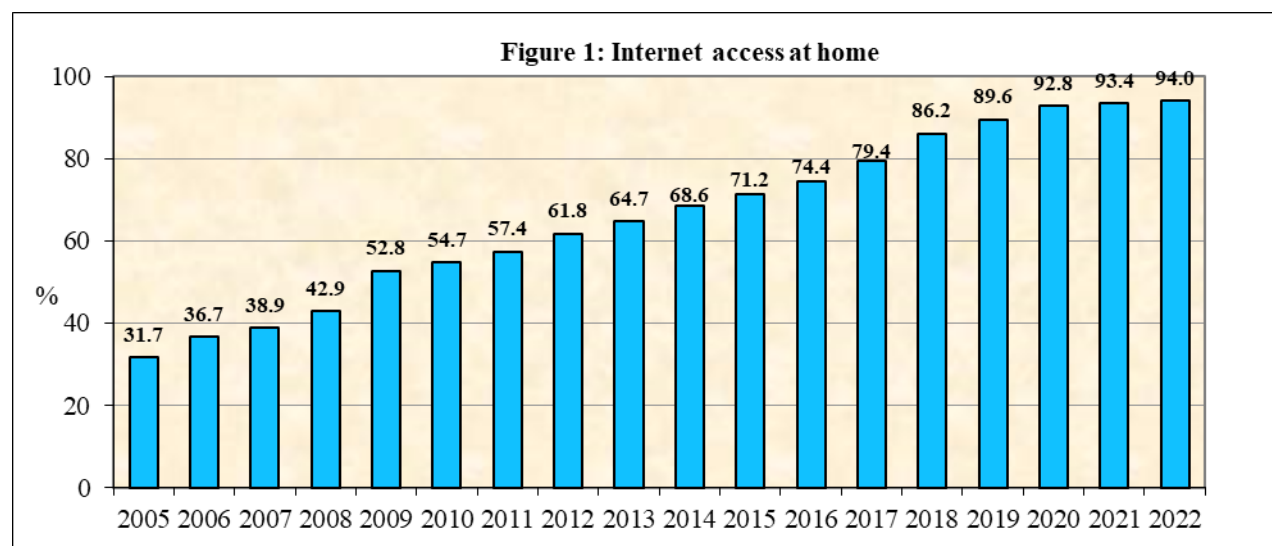
All individuals, aged 16-74, within each sampled household were selected.

## **B. MAIN FINDINGS**

### **HOUSEHOLDS**

#### **Access to Information and Communication Technologies**

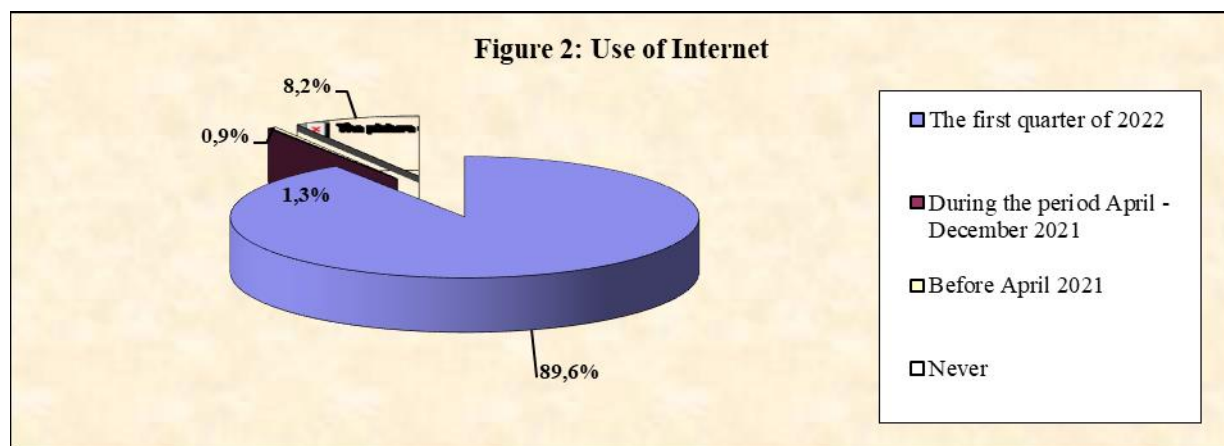
Internet access by households continues to rise in 2022. 94,0% of the households have access to the Internet at home by any device compared to 93,4% in 2021 (Figure 1).



## INDIVIDUALS

### Use of the Internet

89,6% of individuals aged 16 – 74 accessed the Internet in the first quarter of 2022. A percentage of 8,2% stated that they never used the Internet while, 0,9% used the Internet before April of 2021 (Figure 2).



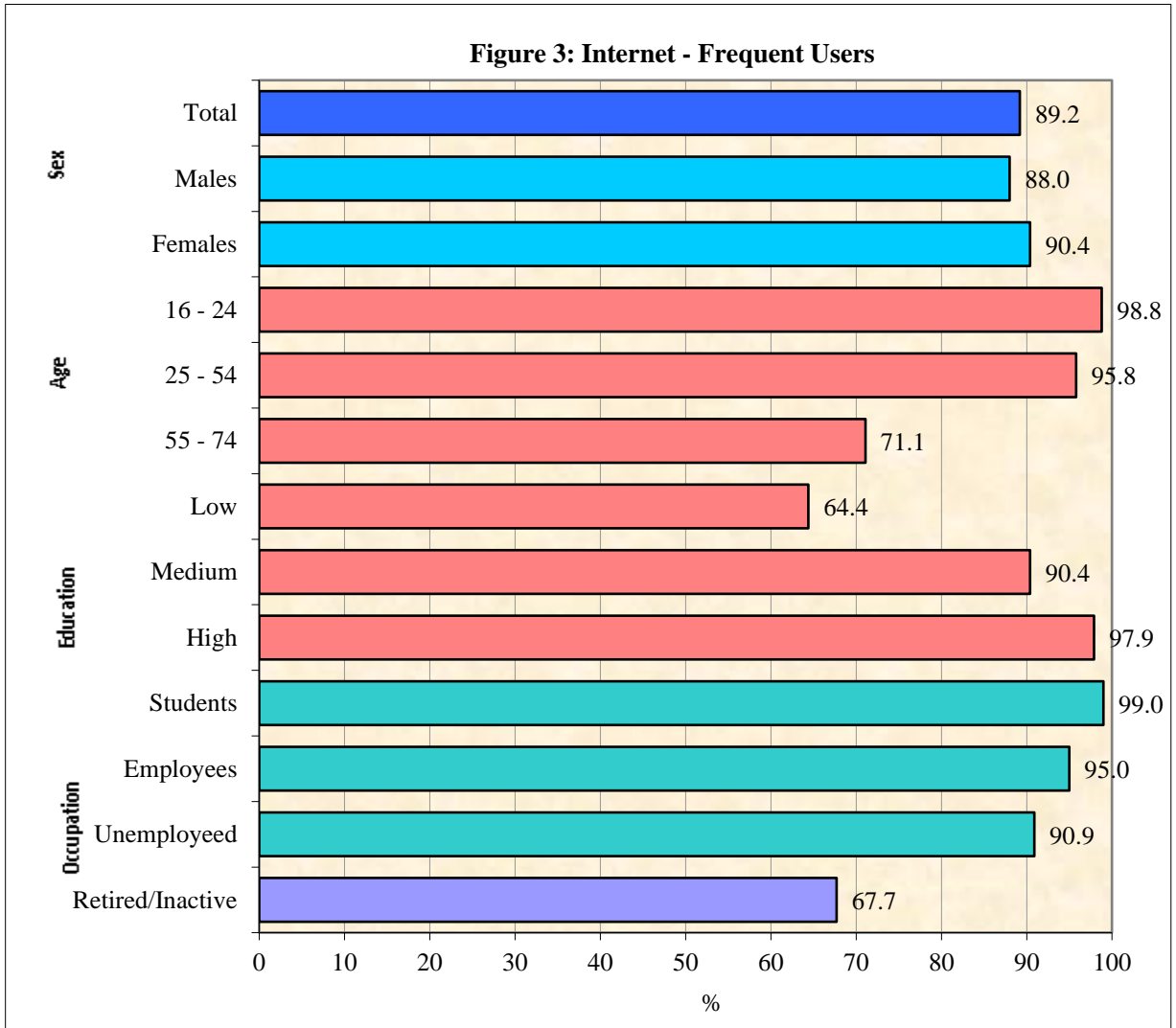
Regarding the frequency of Internet use, nine out of ten persons use the Internet at least once a week. The Internet use decreases with age. Starting from 98,8% for the 16 – 24 age group the Internet use gradually drops to 71,1% for the 55 – 74 age group (Figure 3).

Education is grouped into 3 main categories: low educational attainment level which includes less than primary education up to lower secondary education, medium educational attainment level which includes upper secondary education up to Post secondary non-tertiary (< 2 years) education and high educational attainment level which includes short-cycle tertiary (2-3 years) education up to University (PhD).

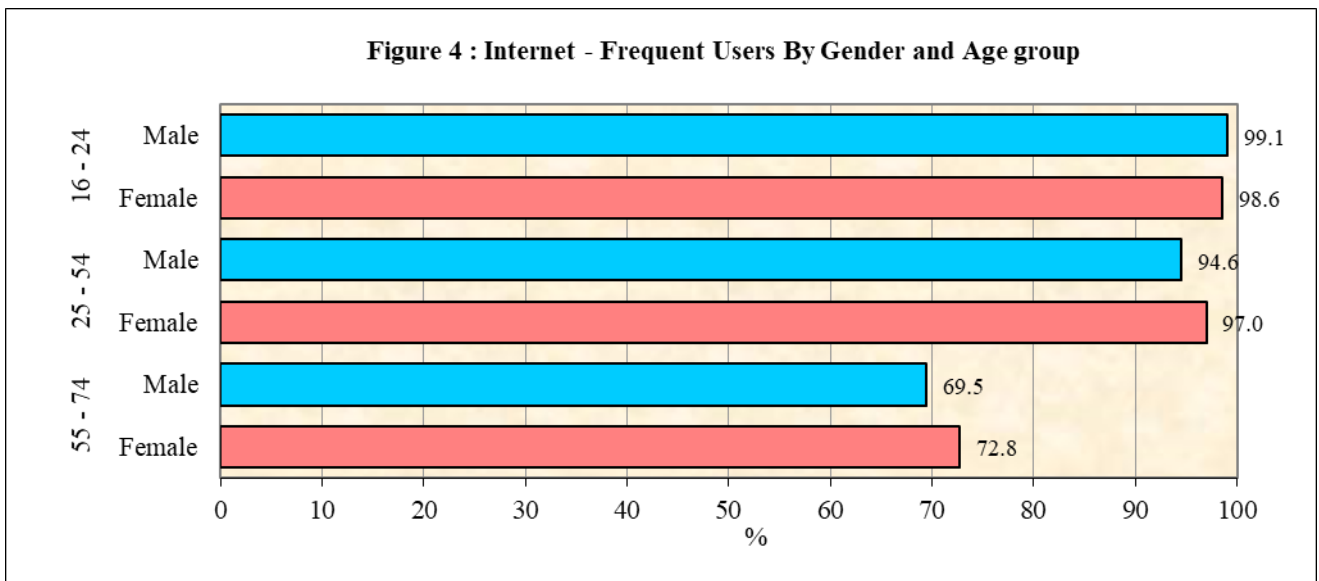
People with high educational attainment level use the Internet more frequently than people with low educational attainment level. More specifically, 97,9% of people with high educational attainment level use the Internet at least once a week compared to 64,4% of people with low educational attainment level (Figure 3).

There is also a difference between the frequency of Internet usage depending on the occupation. The most frequent Internet users (at least once a week) are students (99,0%) followed by employees (95,0%). Unemployed persons come third with 90,9% and retired or inactive persons are last with 67,7% (Figure 3).

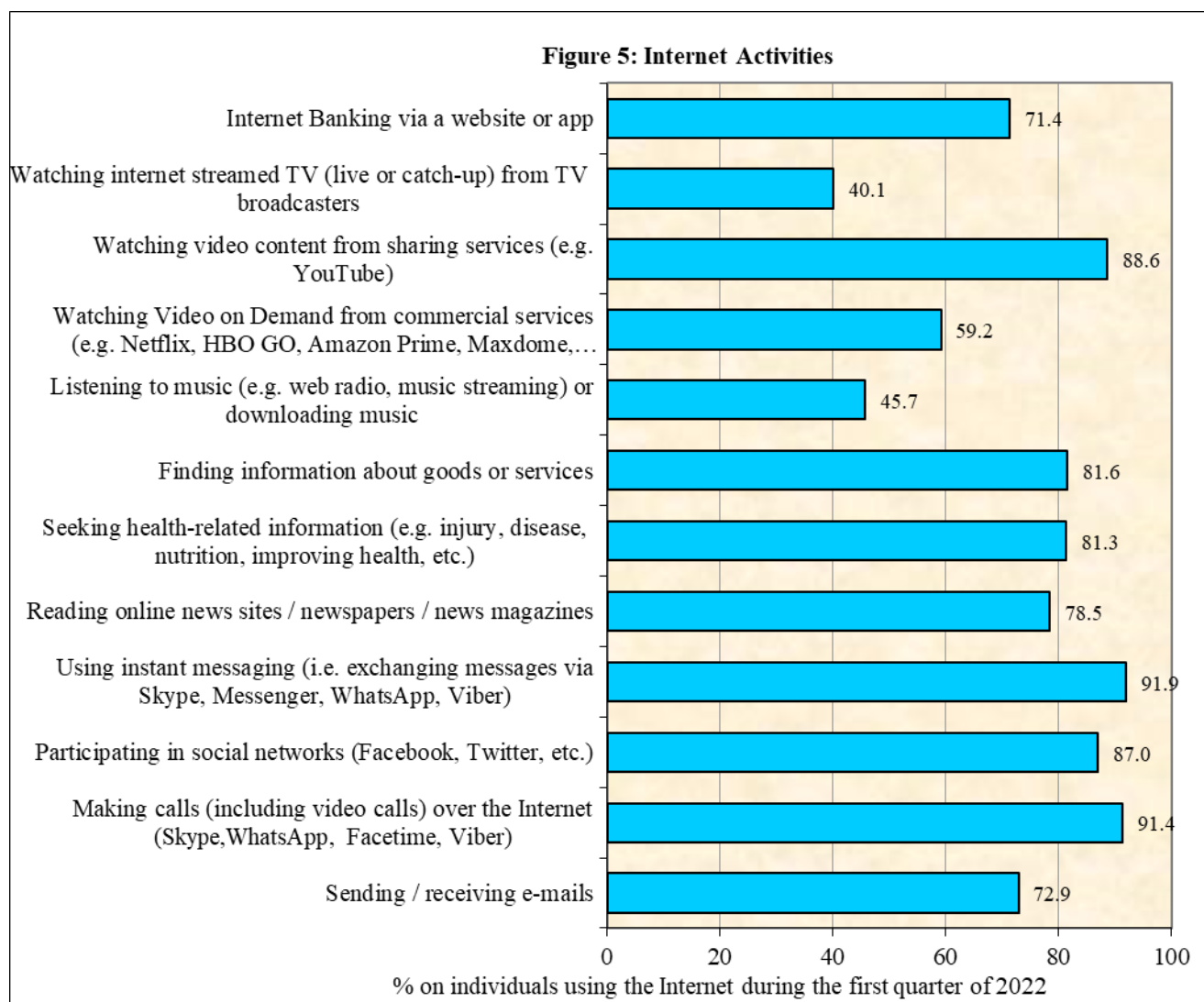
Finally, the percentages of female frequent users compared to male frequent users are higher. The percentages are 90,4% and 88,0% respectively (Figure 3).



Regarding the age group 16-24 the frequency of Internet usage is similar in both males and females (99,1% and 98,6% respectively). 97,0% of females and 94,6% of males aged 25-54 use the Internet frequently. In the age group 55-74 the Internet usage drops to 69,5% of males and 72,8% of females (Figure 4).



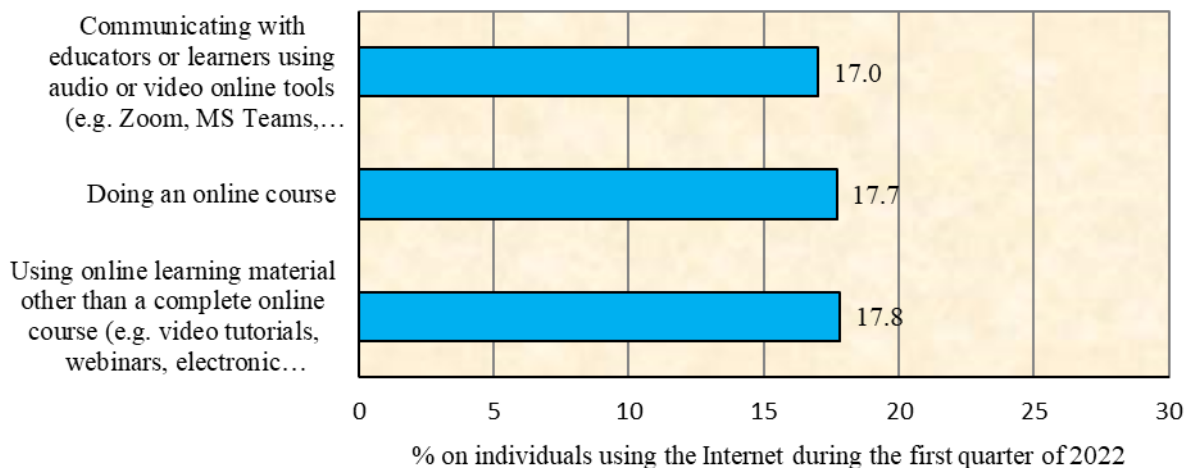
The most popular Internet activities by individuals during the first quarter of 2022 were instant messaging via Skype, Messenger, WhatsApp and Viber (91,9%), making calls over the Internet (91,4%), watching video content from sharing services like YouTube (88,6%), participating in social networks like Facebook and Twitter (87,0%), finding information about goods or services (81,6%), seeking health related information (81,3%) and reading online news / newspapers / magazines (78,5%). Sending / receiving emails and Internet banking follow with 72,9% and 71,4% respectively (Figure 7).



Learning activities refer to activities carried out over the Internet for professional, educational or private purposes. It is worth mentioning that almost 1 out of 5 people that have used the internet during the first quarter of 2022 have participated in some kind of learning activity. 17,8% of individuals have used online learning material other than a complete online course (e.g., video tutorials, webinars, electronic textbooks, learning apps or platforms) and 17,7% have done an online course. Also 17,0% of individuals have communicated with educators or learners using audio or video online tools (e.g., Zoom, MS Teams, Google Classroom, etc.) (Figure 6).



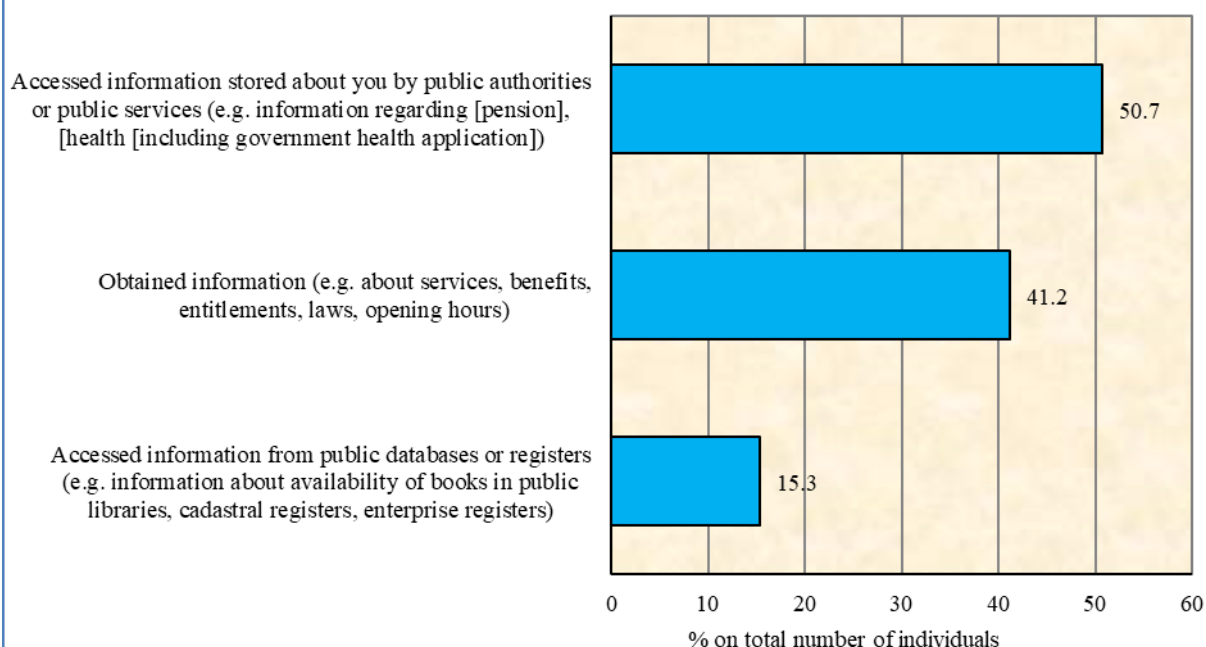
**Figure 6: Learning activities over the Internet for professional , educational or private purposes**



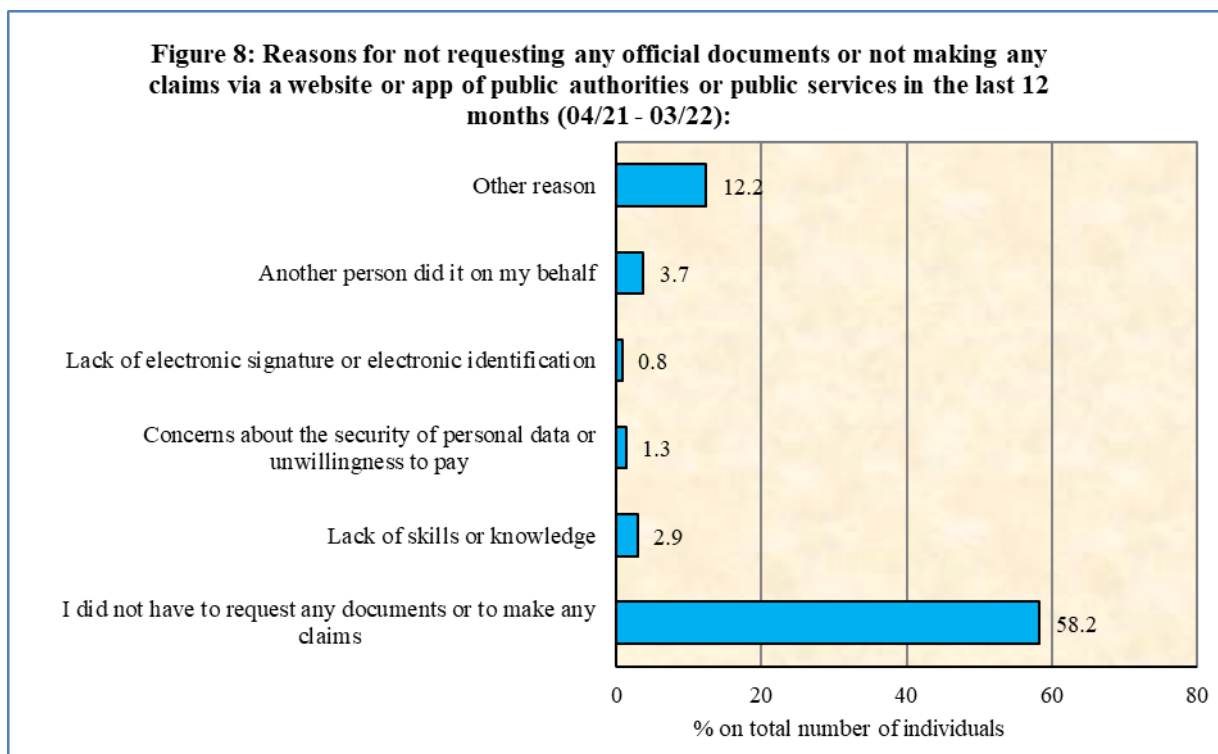
### **Use of e-Government**

During the period of April 2021 - March 2022, 50,7% of individuals used the Internet to access information stored about them by public authorities or public services ,41,2% obtained information (e.g., about services, benefits, entitlements, laws, opening hours) and 15,3% accessed information from public databases or registers (Figure 7).

**Figure 7: Activities via a website or app of public authorities or public services for private purposes in the last 12 months (04/21 - 03/22):**



58,2% of total number of individuals said that they did not have to request any documents or make any claims via a website or app of public authorities or public services. Other reason was second with 12,2%, followed by individuals who said that someone else did it on their behalf (3,7%) (Figure 8).



## Use of e-Commerce

The percentage of individuals buying or ordering goods or services over the Internet during the first quarter of the year decreased from 48,0% in 2021 to 37,0% in 2022 (Figure 9).



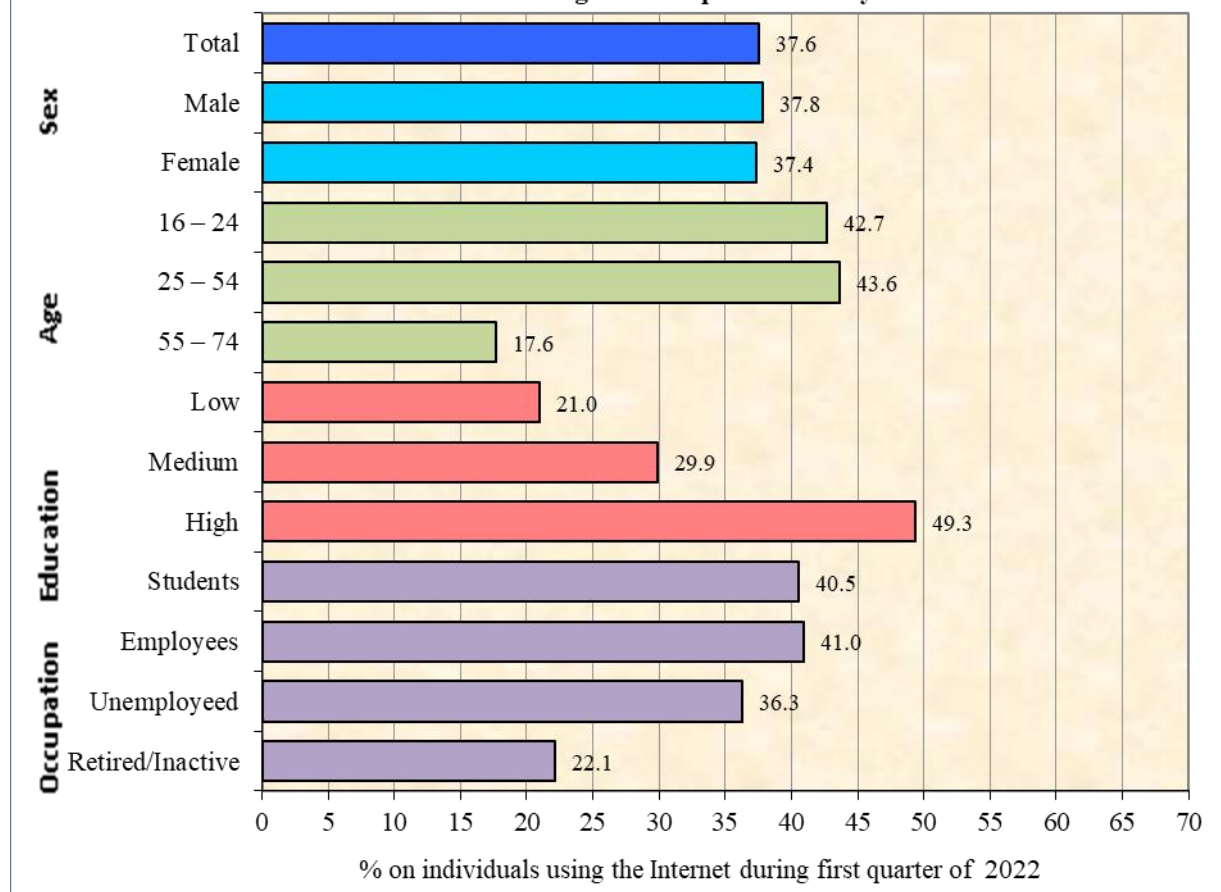
The age, educational level and occupation of a person seem to affect the e-commerce activity. Persons within the age group 25 - 54 years are more actively involved in e-commerce. 43,6% of the individuals within the age group 25 - 54, who have used the Internet during the first quarter of 2022, have bought or ordered goods or services for private use via the internet during the first quarter of the year. Individuals within the age group 16-24 follow with 42,7%. Less than 1 out of five individuals aged 55-74 bought or ordered goods and services for private use during the first quarter of 2022 (Figure 10).

Furthermore, educational attainment level seems to play a very important role in the shopping habits of individuals. Individuals with high educational attainment level prefer online shopping, since 49,3% of individuals with high educational attainment level who used the Internet during the first quarter of the year have bought or ordered goods and services via the Internet. That percentage drops to 29,9% in individuals with medium educational attainment level and 21,0% in individuals with low level (Figure 10).

41,0% of employees who used the Internet during the first quarter of 2022, have bought or ordered goods and services over the Internet. Students follow with 40,5%, unemployed with 36,3% and retired or inactive with 22,1% (Figure 10).

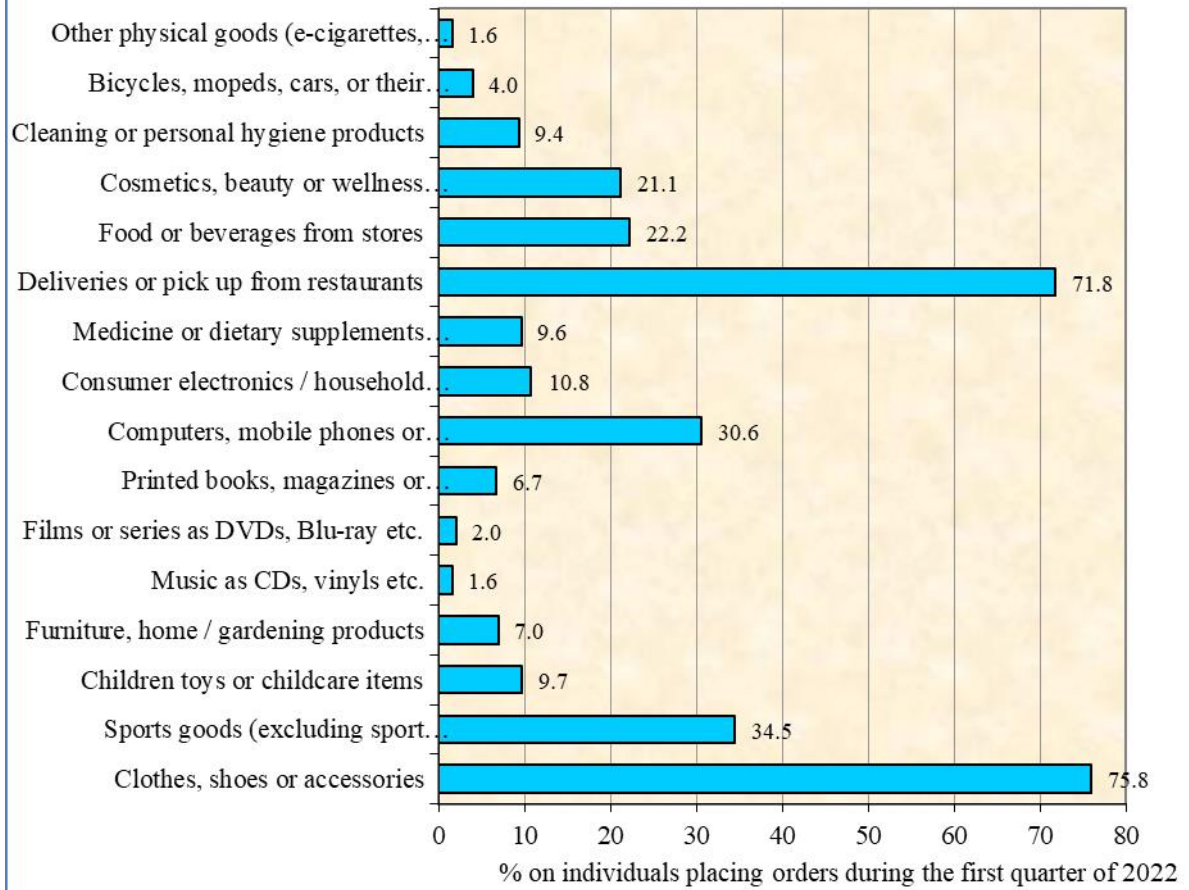
Younger individuals, highly educated people, employees and students seem to be the most predominant online shoppers.

**Figure 10: Individuals who bought or ordered of goods or services for private use over the Internet during the first quarter of the year**

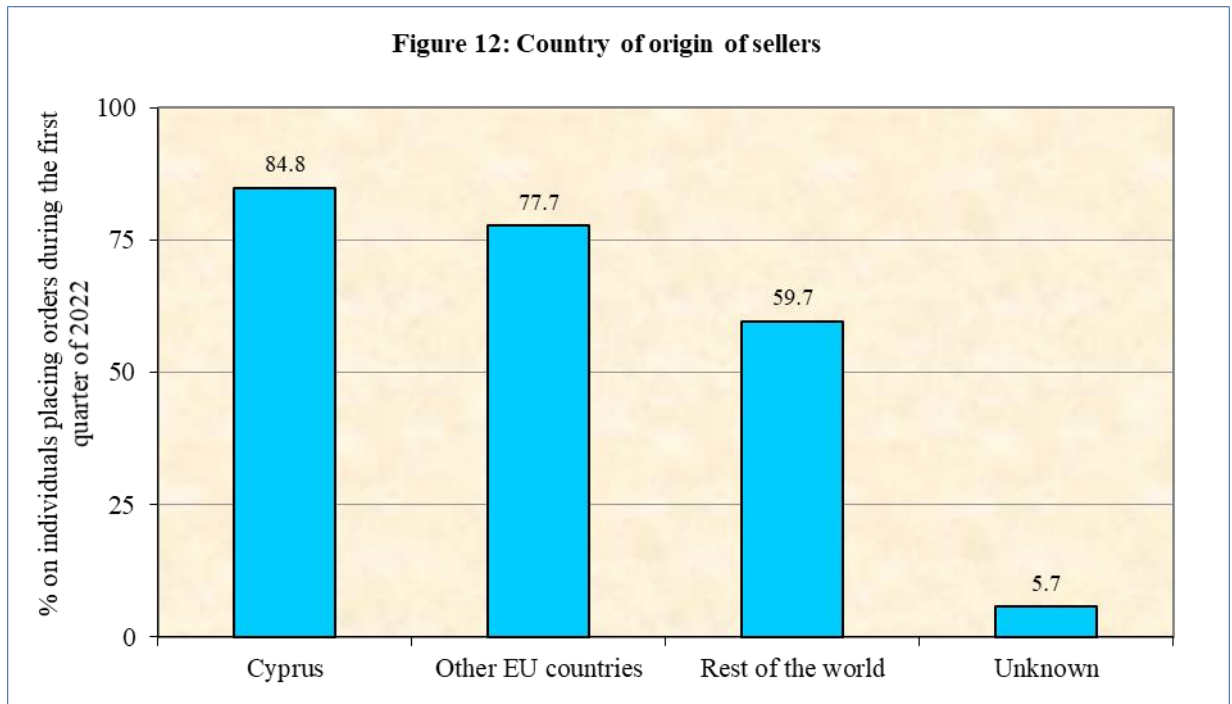


75,8% who ordered goods or services over the Internet in the first quarter of 2022, ordered clothes, shoes or accessories. The answer “Deliveries or pick up from restaurants, fast-food chains and catering services follow with 71.8%. 34,5% of individuals ordered sports goods (excluding sport clothing), and 30,6% ordered computers, tablets, mobile phones or accessories. Food or beverages from stores or from meal-kits providers and cosmetics, beauty or wellness products follow with 22,2% ad 21,1% respectively (Figure 11).

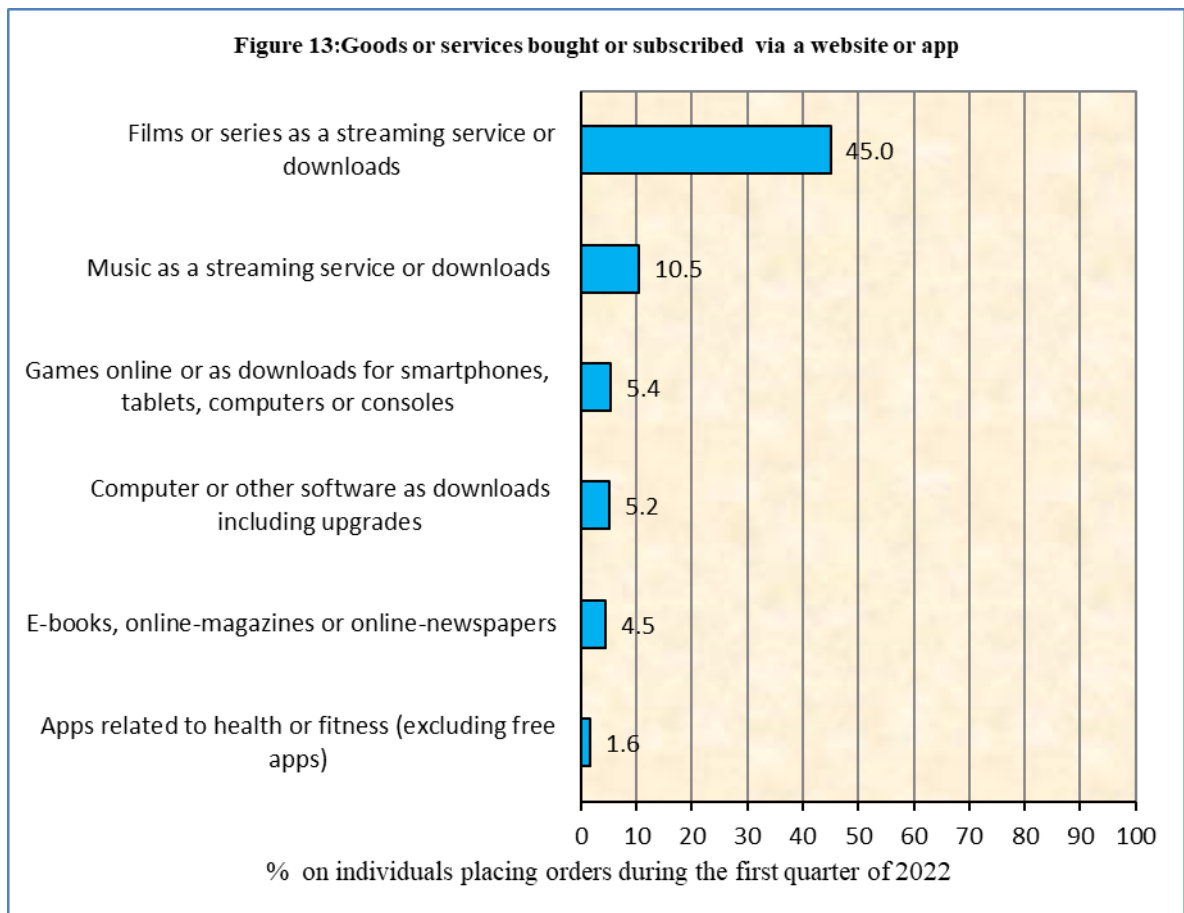
**Figure 11: e-Commerce  
Goods and Services ordered over the Internet**



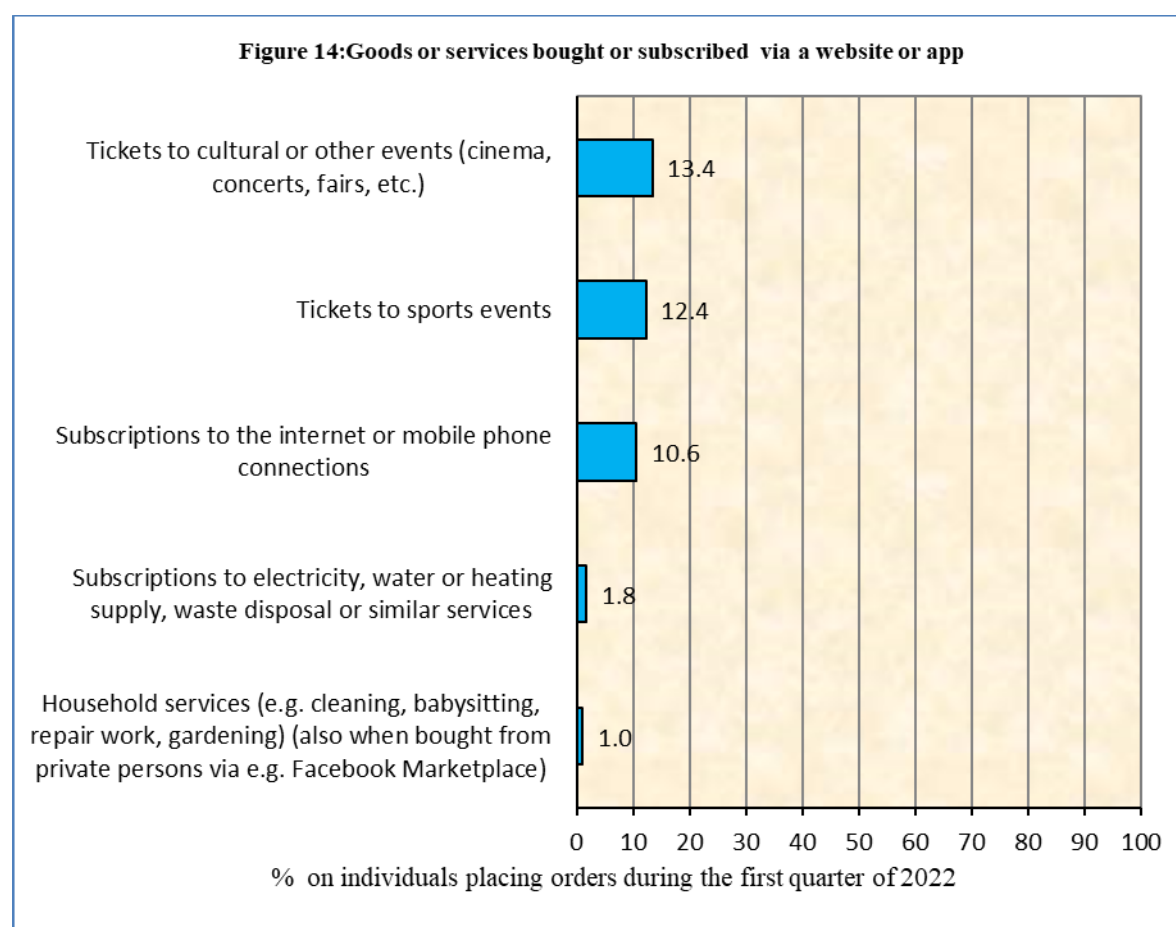
Among the people that bought or ordered goods or services for private use in the first quarter of 2022 a significant percentage of 84,8% preferred sellers from Cyprus, 77,7% bought or ordered from sellers from other EU countries and 59,7% from sellers from the rest of the world. 5.7% bought or ordered goods from sellers whose country of origin was not known (Figure 12).



The most common services bought or subscribed via the Internet are films or series as a streaming service or downloads (45,0%). Music as a streaming service, online games and computer or other software as downloads follow with 10,5%, 5,4% and 5,2% respectively (Figure 13).



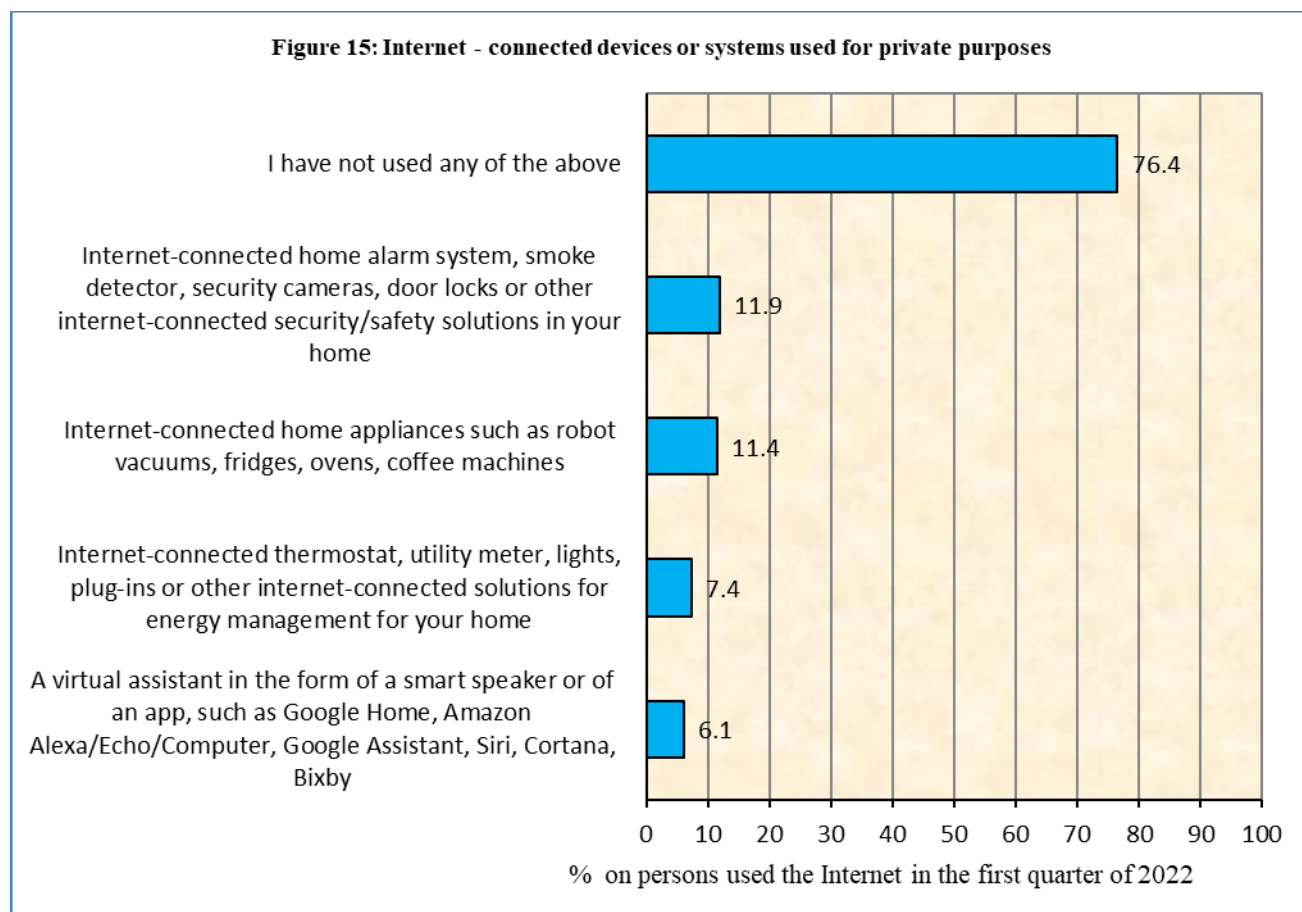
13,4% of individuals placing orders the first quarter of 2022 bought online tickets to cultural events and 12,4% to sports events. Also, 10,6% made online subscriptions to the Internet or mobile connections (Figure 14).





## Internet of Things

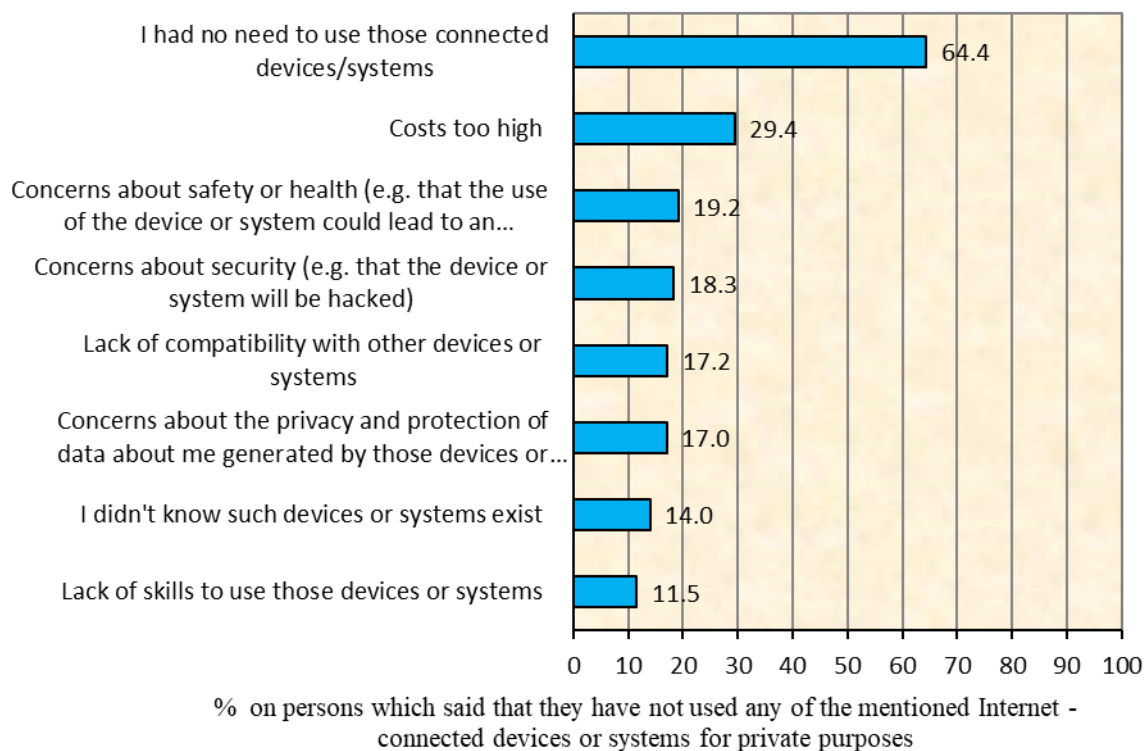
Among the people that used the Internet for private purposes in the first quarter of 2022, 76,4% reported that they have not used any of the Internet connected devices or systems for private purposes. 11,9% used Internet-connected home alarm system, security cameras, etc. and 11,4% used Internet-connected home appliances such as robot vacuums, fridges, ovens, coffee machines (Figure 15).



The main reason for not using any of the mentioned Internet – connected devices or systems was that there was no need to use them (64,4%). The high usage high and concerns about safety or health follow with 29,4% and 19,2% respectively (Figure 16).

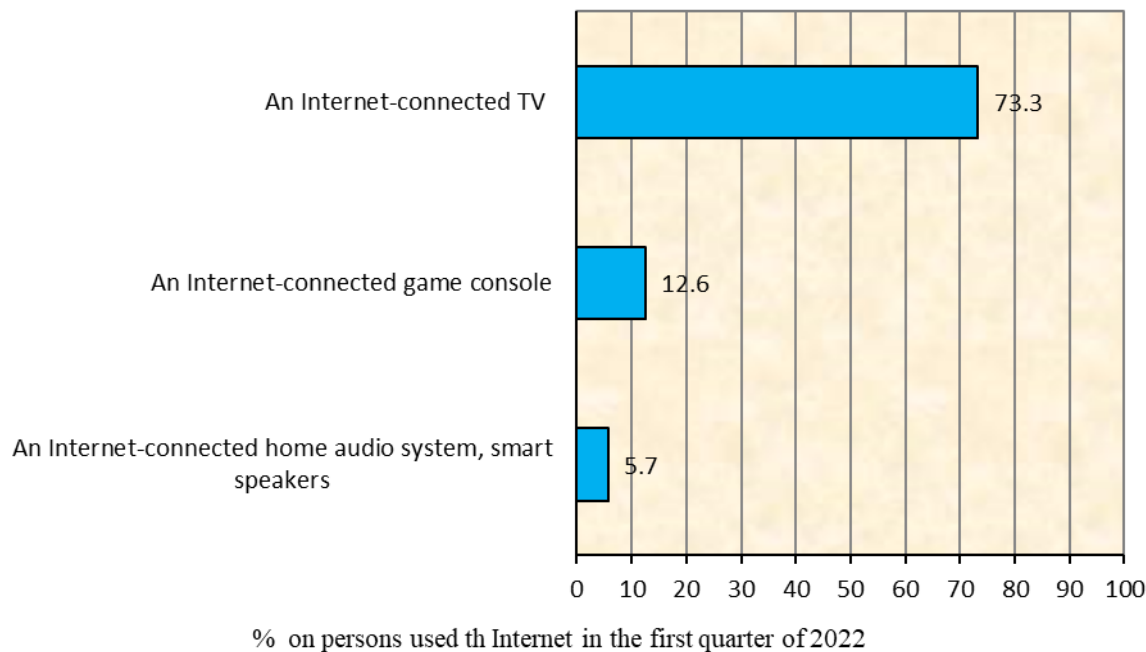


**Figure 16: Reasons for not using any of the mentioned Internet - connected devices or systems for private purposes**



73,3% of the persons who used the Internet in the first quarter of 2022, used an Internet – connected TV, 12,6% an Internet - connected game console and 5,7% an Internet - connected home audio system, smart speakers (Figure 17).

**Figure 17: Devices which you used the Internet at home**



## Green ICT

The main characteristic considered as the most important factor when buying a smartphone or a laptop, etc. over the Internet during the first quarter of 2022, was the price (88,5%). Hard drive characteristics, processor speed and energy efficiency of the device follow with 72,8% and 48,5% respectively. Furthermore, the possibility to extend the life span of the device by buying extra guarantee and the eco-design of the device, follow with 43.6% and 43,2% respectively (Figure 18).

