

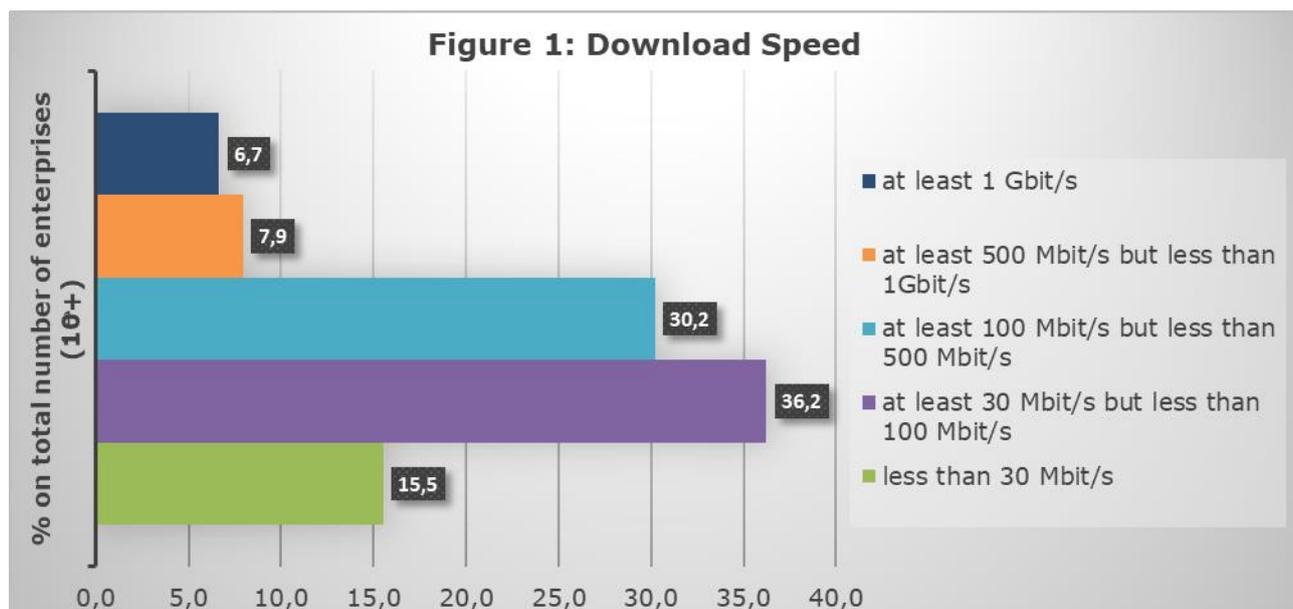
## Results of the Survey on Information and Communication Technologies (ICT) Usage and e-Commerce in Enterprises 2021

### High Speed Internet connection

Demand for high speed internet connections (100 Mbit/s or more) has increased significantly over the years. In 2021, 6,7% of all enterprises with 10 or more employed persons in Cyprus have internet connection with speeds higher than 1 Gbit/s, 7,9% have internet connection speeds between 500 Mbit/s – 1 Gbit/s and 30,2% have internet connection speeds between 100 - 500 Mbit/s (Figure 1)

Enterprises with internet speeds lower than 30 Mbit/s have been decreasing steadily over the years from 81,7% in 2016 to 15,5% in 2021. Speeds between 30 - 100 Mbit/s still remain the most popular in 2021, but have dropped since the previous year (-1,0%) while internet speeds between 100Mbit/s -500Mbit/s have increased significantly from 19,8% in 2020 to 30,2% in 2021. (Table 1)

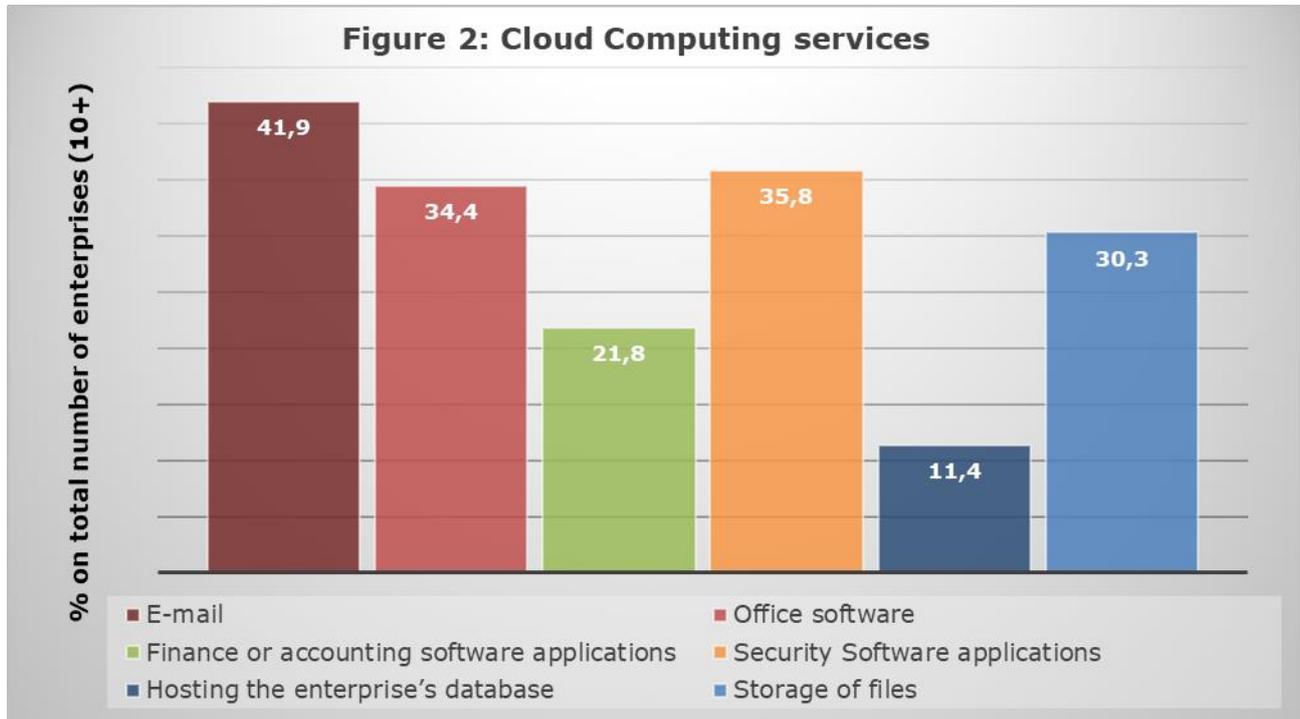
For more information, [click here](#).



### Cloud Computing

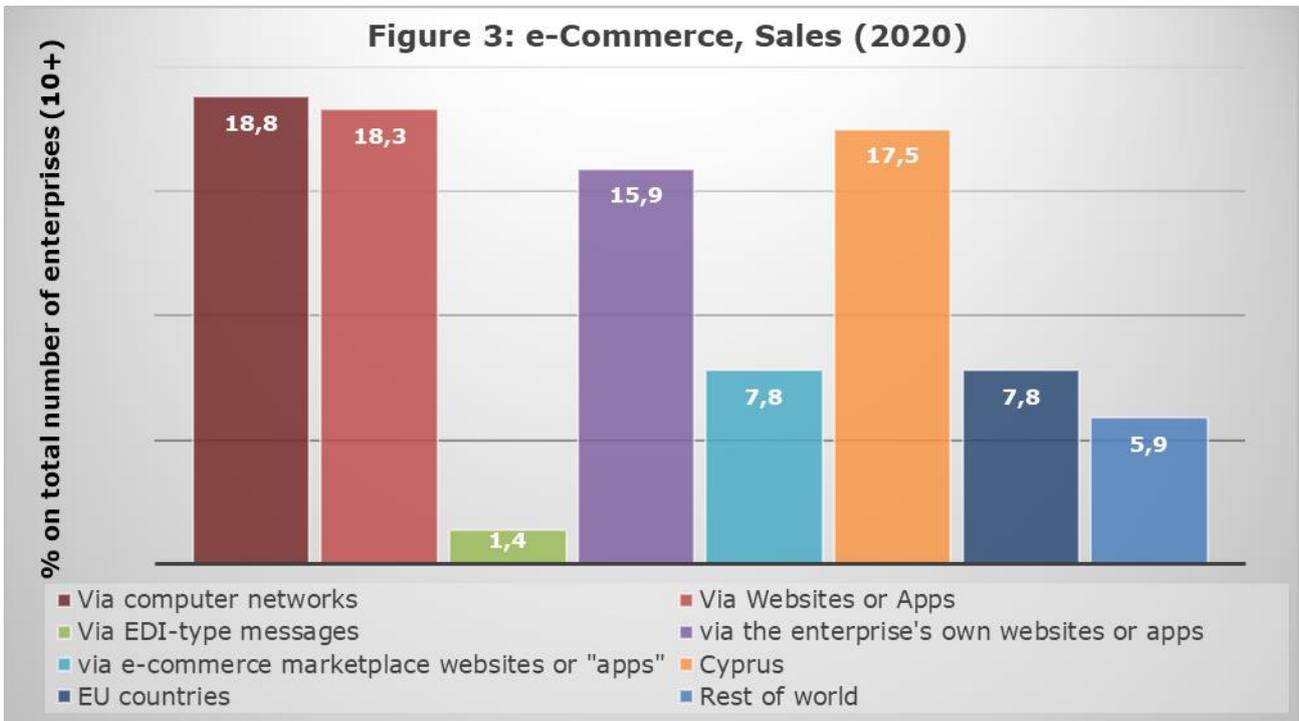
Cloud computing in Cyprus is becoming more and more popular among enterprises. In 2021, 50,3% of enterprises with ten or more employed persons bought Cloud Computing services, compared to 34,6% in 2020 (Table 2).

The main use of cloud computing services in enterprises is for e-mail (41,9%), for security software applications (35,8%), for office software (34,4%) and for storage of files (30,3%). (Figure 2)



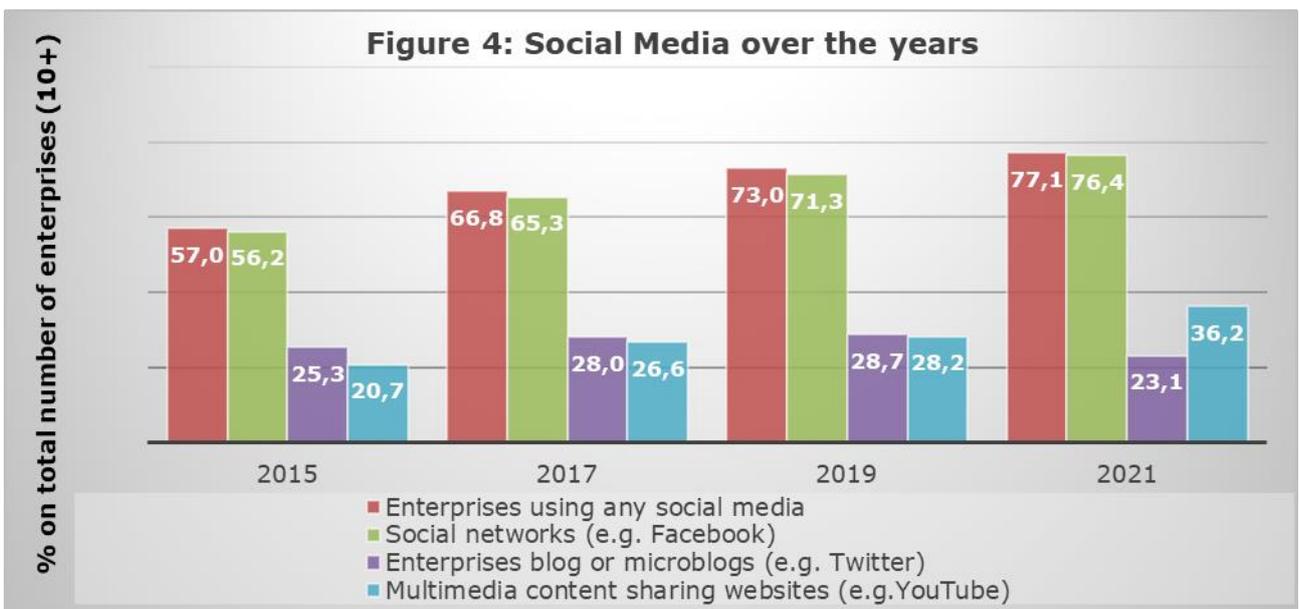
### **E-Commerce Sales**

In 2020, 18,8% of all enterprises received orders for goods and services via computer networks compared to 16,4% in 2019. 18,3% received orders for goods and services via websites or “apps” and 1,4% via EDI – type messages. The corresponding percentages for 2019 were 15,2% and 3,1% respectively. 15,9% of all enterprises received orders for goods and services via the enterprise’s own websites or “apps” while 7,8% received orders via e-commerce marketplace websites or “apps” used by several enterprises for trading products. 17,5% of enterprises received orders via websites or “apps” from customers located in Cyprus, 7,8% from customers from other EU countries and 5,9% from customers from the rest of the world. (Figure 3)



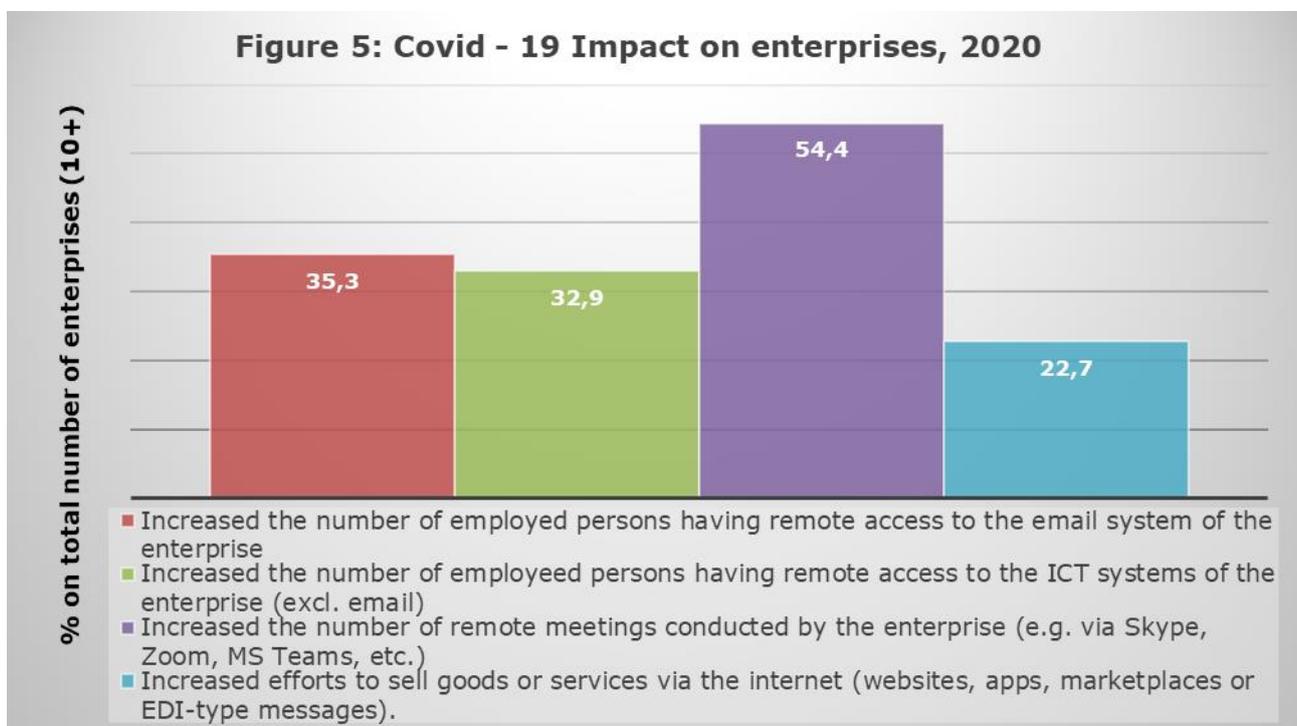
**Social Media**

Over the years an increase in the use of Social Media is observed, from 57,0% in 2015 to 77,1% in 2021. Social networks like Facebook, LinkedIn etc. were always the most favorable amongst enterprises. The second most favorable in 2021 was multimedia content sharing websites such as YouTube, Flickr, etc. followed by blogs or microblogs (Figure 4).



## **COVID-19 IMPACT**

During 2020, due to the Covid-19 pandemic, 35,3% of all enterprises increased the number of employed persons having remote access to the email system of the enterprise, 32,9% increased the number of employed persons having remote access to the ICT systems of the enterprise (excl. email) and 54,4% increased the number of remote meetings conducted by the enterprise (e.g. via Skype, Zoom, MS Teams, etc.). Furthermore 22,7% of all enterprises stated that due to the Covid-19 pandemic the enterprise started or increased its efforts to sell goods or services via the internet (websites, apps, marketplaces or EDI-type messages) (Figure 5).



## **Internet of Things (IoT)**

33,3% of enterprises declared that they use some kind of interconnected devices or systems (smart devices or systems) that can be monitored via the internet (IoT). The main reasons for using IoT were for premises' security (32,1%), for energy consumption management (8,6%) and for logistics management (4,5%) (Table 3).

**Table 1**

<b>Download Speed</b> (% on total number of enterprises (10+))	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Less than 30 Mbit/s	81,7	70,4	58,9	44,0	26,6	15,5
At least 30 Mbit/s but less than 100 Mbit/s	11,8	18,9	25,2	32,2	37,2	36,2
At least 100 Mbit/s but less than 500 Mbit/s	...	...	...	...	19,8	30,2
At least 500 Mbit/s but less than 1 Gbit/s	...	...	...	...	5,3	7,9
At least 1 Gbit/s	...	...	...	...	6,7	6,7

**Table 2**

<b>Cloud Computing Services</b> (% on total number of enterprises (10+))	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Any Cloud Computing Service	26,6	...	34,6	50,3
E-mail	21,7	...	29,8	41,9
Security software applications	...	...	...	35,8
Office software	15,9	...	24,9	34,4
Storage of files	17,7	...	23,9	30,3
Finance or accounting software "Apps"	8,2	...	13,9	21,8
Hosting of enterprise's database	8,4	...	13,3	11,4

**Table 3**

<b>Internet of Things (IoT)</b> (% on total number of enterprises (10+))	<b>Total</b>	<b>Small</b>	<b>Medium</b>	<b>Large</b>
<b>Enterprises using IoT</b>	33,3	31,5	43,6	42,4
For premises' security	32,1	30,6	41,3	35,9
For energy consumption management	8,6	7,4	14,3	25,0
For logistics management	4,5	3,3	11,3	15,2

## **METHODOLOGICAL NOTES**

### **Aim**

The aim of the survey is to collect data about the use of information and communication technologies by the enterprises, the access and use of the internet, e-commerce, sharing information electronically within the enterprise, use of cloud computing services, Internet of Things, Artificial Intelligence and the Covid-19 impact on enterprises. These data are

necessary for the implementation of policy programmes of both the Government and the Private Sector.

### **Coverage**

The survey took place during February-May, 2021 and covered approximately 2.103 enterprises with 10 or more employed persons in the following economic activities:

<b>NACE Rev.2</b>	<b>Description</b>
C	Manufacturing
D	Electricity, Gas, Steam and Air Conditioning Supply
E	Water Supply, Sewerage, Waste Management and Remediation Activities
F	Construction
G	Wholesale and Retail Trade. Repair of motor vehicles, motorcycles and personal and household goods
H	Transport and Storage
I	Accommodation and Food Service Activities
J	Information and Communication
L	Real Estate Activities
M	Professional, Scientific and Technical Activities
N	Administrative and Support Service Activities
S	Other Service Activities

The survey covers all the government controlled areas of the Republic of Cyprus.

### **Sampling**

For the year 2021 all small, medium and large enterprises (census of enterprises) with 10 or more employed persons and self-employed persons were covered. In the frame there were 16 NACE groups and 3 size groups (Small enterprises (10-49 employed persons),

Medium enterprises (50-249 employed persons) and Large enterprises (250+ employed persons)).

### **Data Collection**

The data collection was conducted with the use of a web based questionnaire.

### **Reference Period**

The data refer to 2021 unless otherwise stated.

### **Definitions**

**Internet connection speed:** the maximum download speed according to the contract with the Internet service provider.

**Electronic commerce (e-Commerce):** An e-Commerce transaction is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders.

**Computers:** Includes personal computers, portable computers (e.g. laptops, notebooks, netbooks), tablets, other portable devices like Smartphones.

**Cloud computing:** refers to ICT services that are used over the internet to access software, computing power, storage capacity etc. These services are delivered from servers of service providers, can be easily scaled up or down, can be used on-demand by the user and are paid for.

**Internet of Things (IoT):** refers to interconnected devices or systems, often called “smart” devices or “smart” systems that collect and exchange data and can be monitored or remotely controlled via the Internet.

#### ***For more information:***

CYSTAT Portal, subtheme [Information Society](#)

[CYSTAT-DB](#) (Online Database)

Data up to 2020 are available in excel format under [Predefined Tables](#)

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