

First Release

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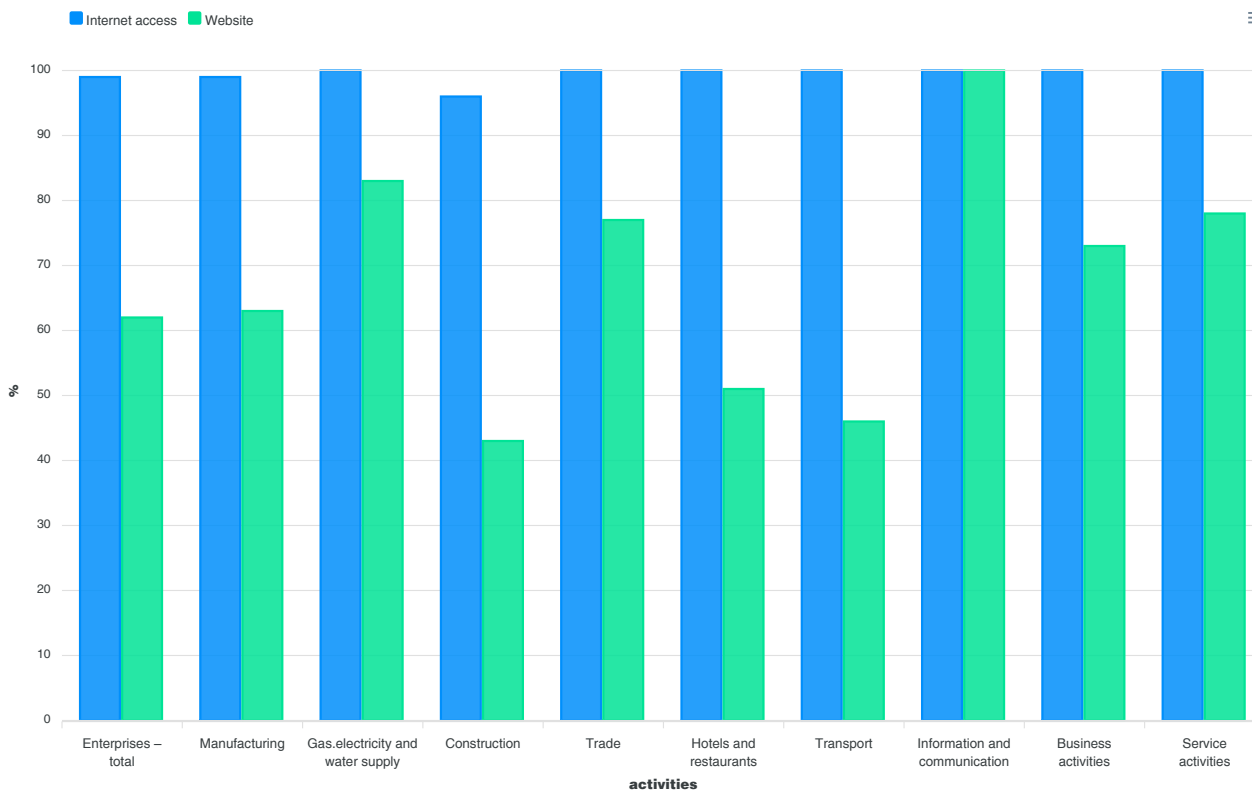
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USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN ENTERPRISES, 2024

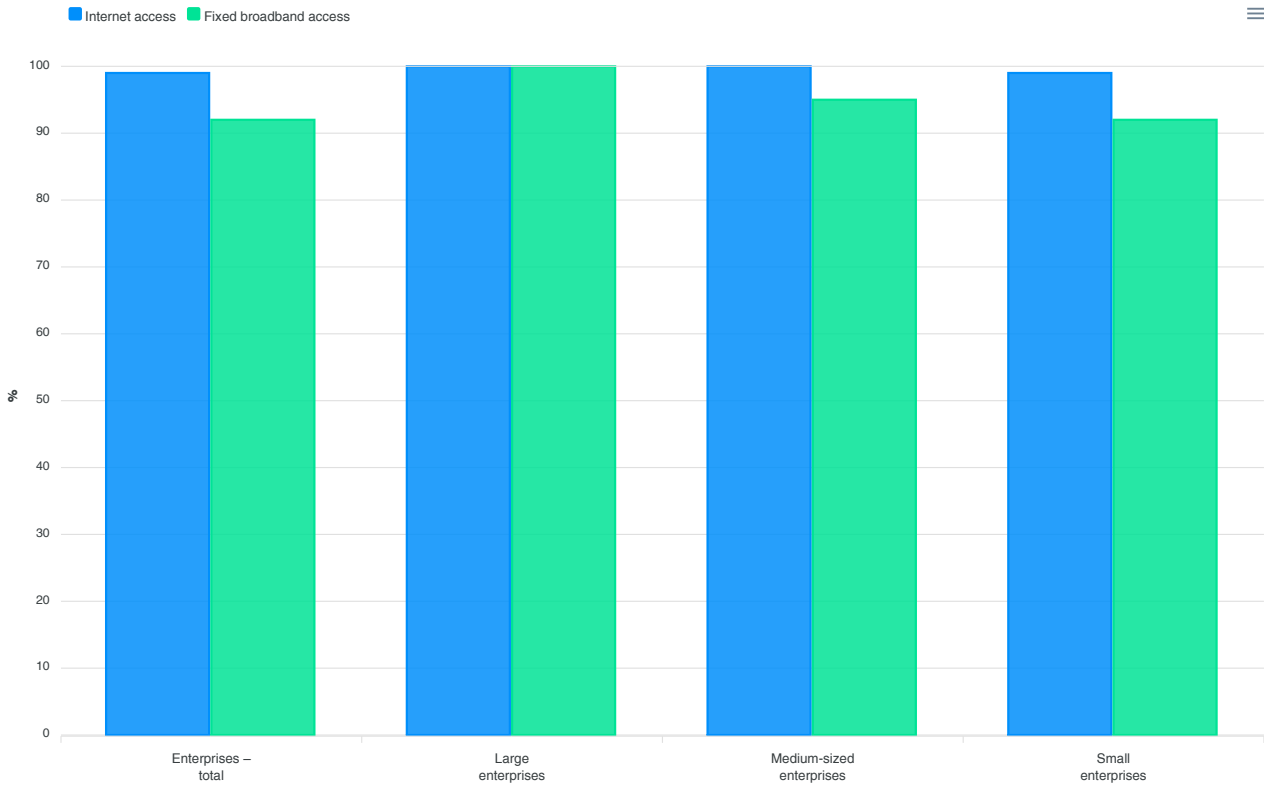
- High level of ICT integration in business conducts; **99%** of enterprises used computers with internet access and **62%** of enterprises owned a website.
- Usage of fixed broadband internet access prevailed; 92% of enterprises used some type of fixed broadband internet connection.
- Internet sales covered only 19% of the total sales of goods and services.
- Cloud computing internet service is used by **42%** of enterprises.

G-1 USAGE OF ICT IN ENTERPRISES, BY ACTIVITIES, 2024



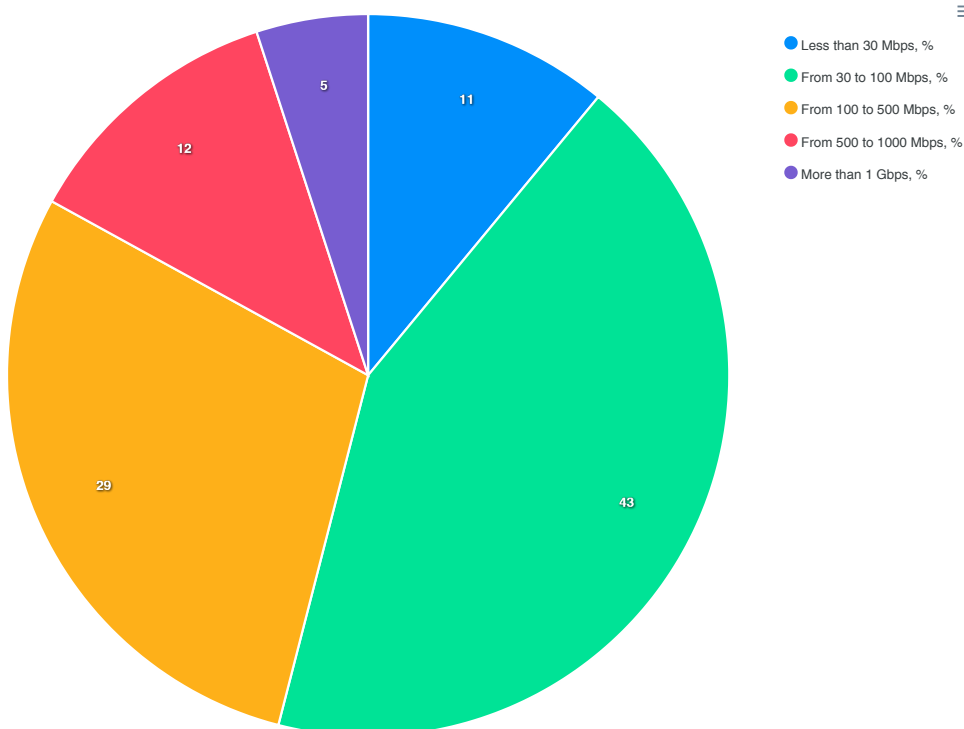
The usage of information and communication technologies is an extremely important part of contemporary business conduct. The survey showed that 99% of enterprises used computers with internet access in their daily work. The internet is a necessity for efficient business conduct, so 62% of enterprises had their own website.

G-2 ACCESS TO INTERNET IN ENTERPRISES, BY ENTERPRISE SIZE, 2024



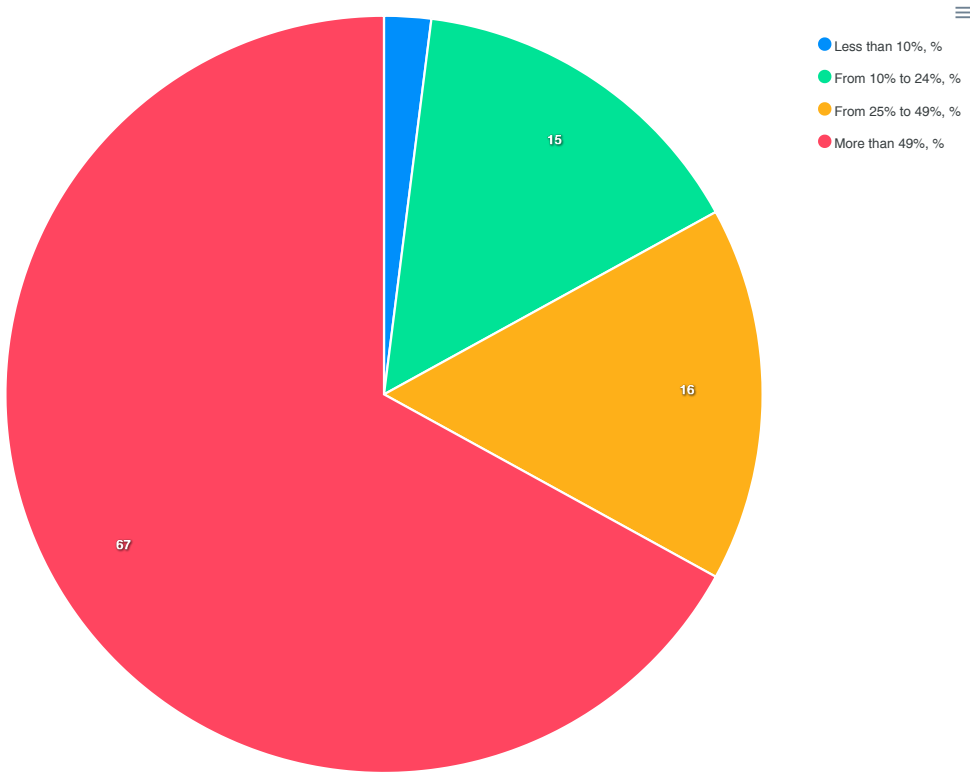
The internet and other network technologies allow for connectivity between sectors within an enterprise and the integration of business processes that contribute to more efficient business conduct. The type and speed of data transfer allow for better quality of business conduct. Broadband fixed access (DSL, cable internet, leased line) was used by 92% of enterprises.

G-3 CONTRACTED SPEED OF INTERNET ACCESS IN ENTERPRISES, 2024

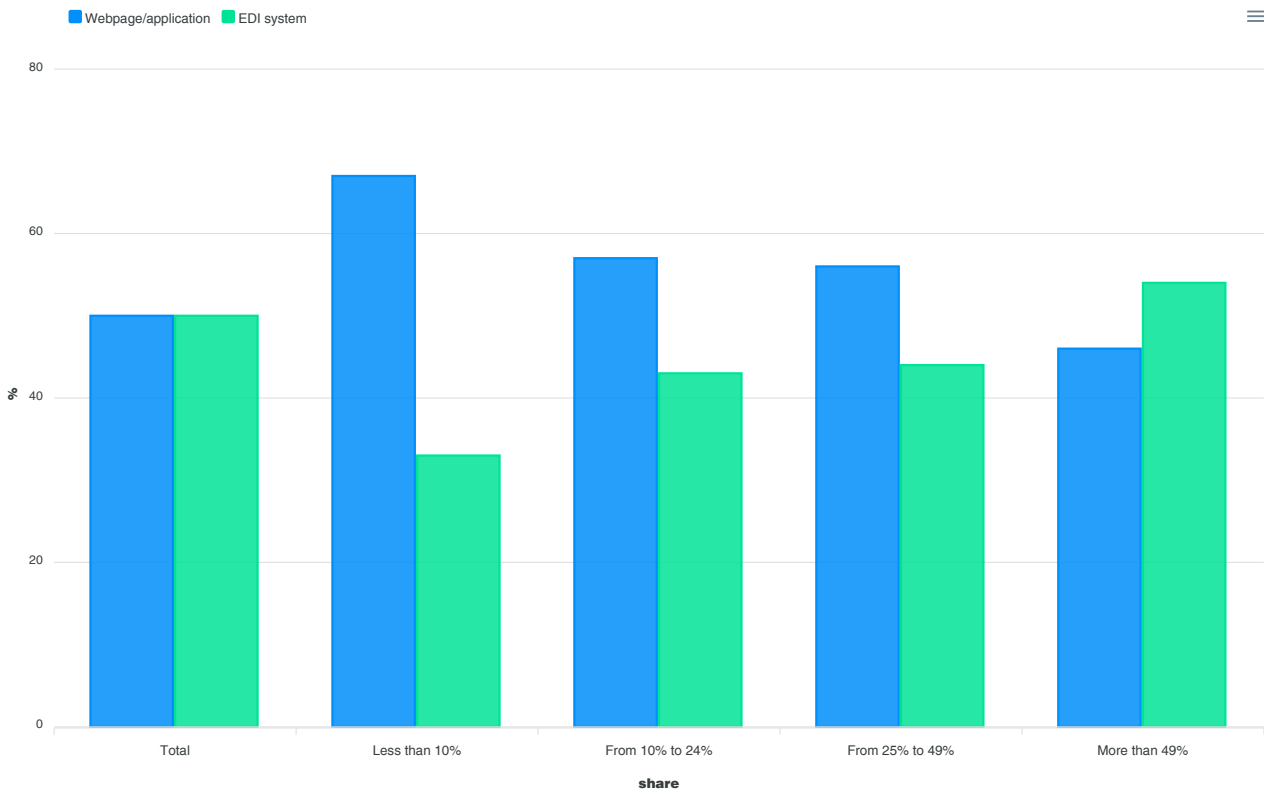


The internet has introduced changes in the way of doing business by enabling the integration of business processes at a higher level. Internet connection speed is becoming one of the most important factors in business conduct. The increasing availability of broadband internet is driving the increase in data transfer speeds. 46% of companies use a transmission speed of more than 100 Mbps (an increase of 3% compared to last year).

G-4 E-COMMERCE – SHARE OF SALES VIA INTERNET COMPARED TO TOTAL SALES, 2023

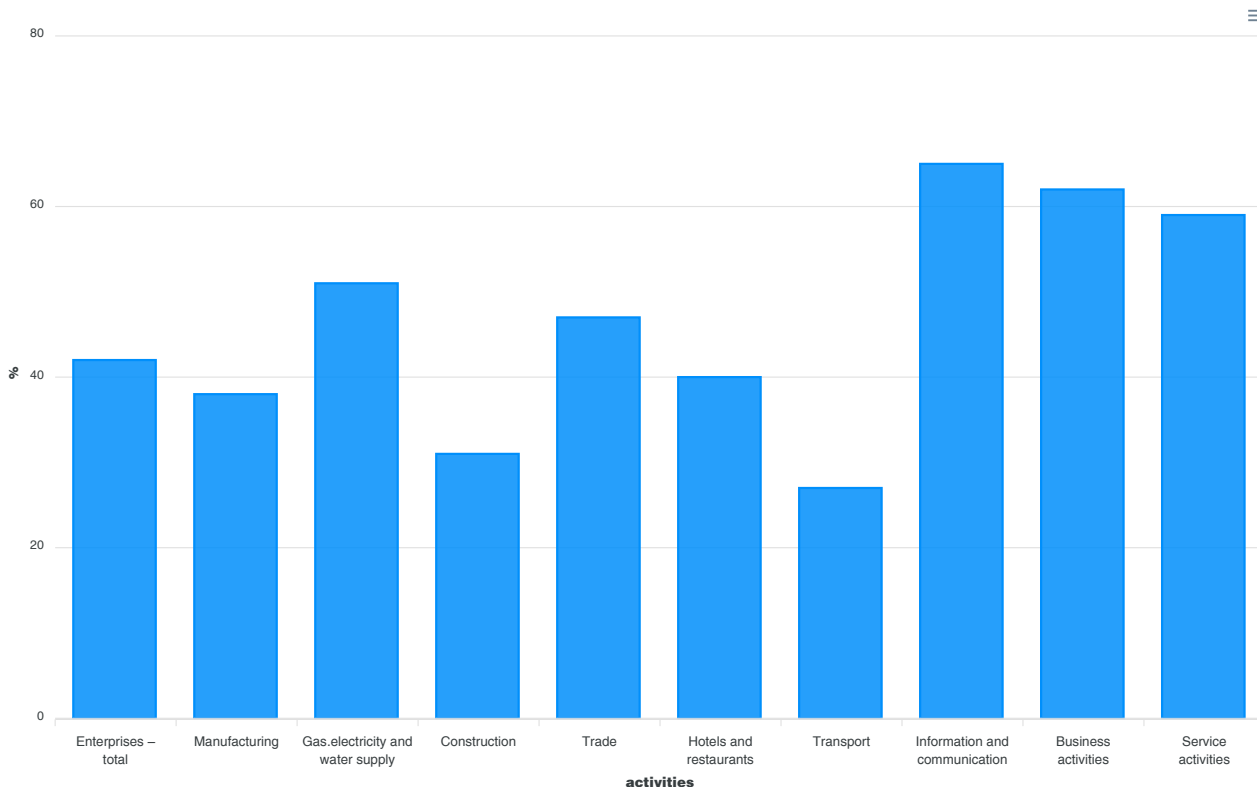


E-COMMERCE – INTERNET SALES, BY SALES TYPE, 2023



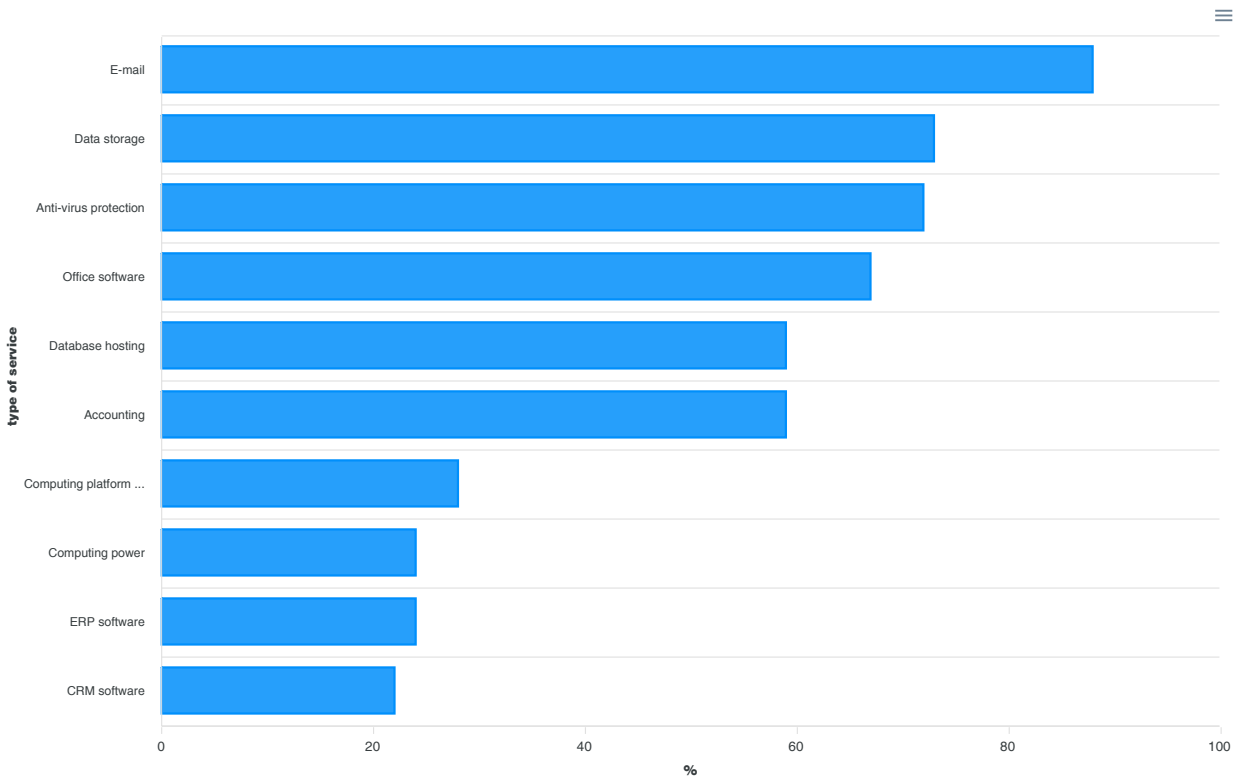
The integration of business processes and communication between business entities via the internet allows for a more efficient offer of goods and services and their purchase and sale on the market. The volume of e-commerce compared to conventional commerce was still rather low and barely 19% of sales were conducted via the internet.

G-5 USAGE OF INTERNET RESOURCES VIA CLOUD COMPUTING SERVICES IN ENTERPRISES, BY ACTIVITIES, 2024



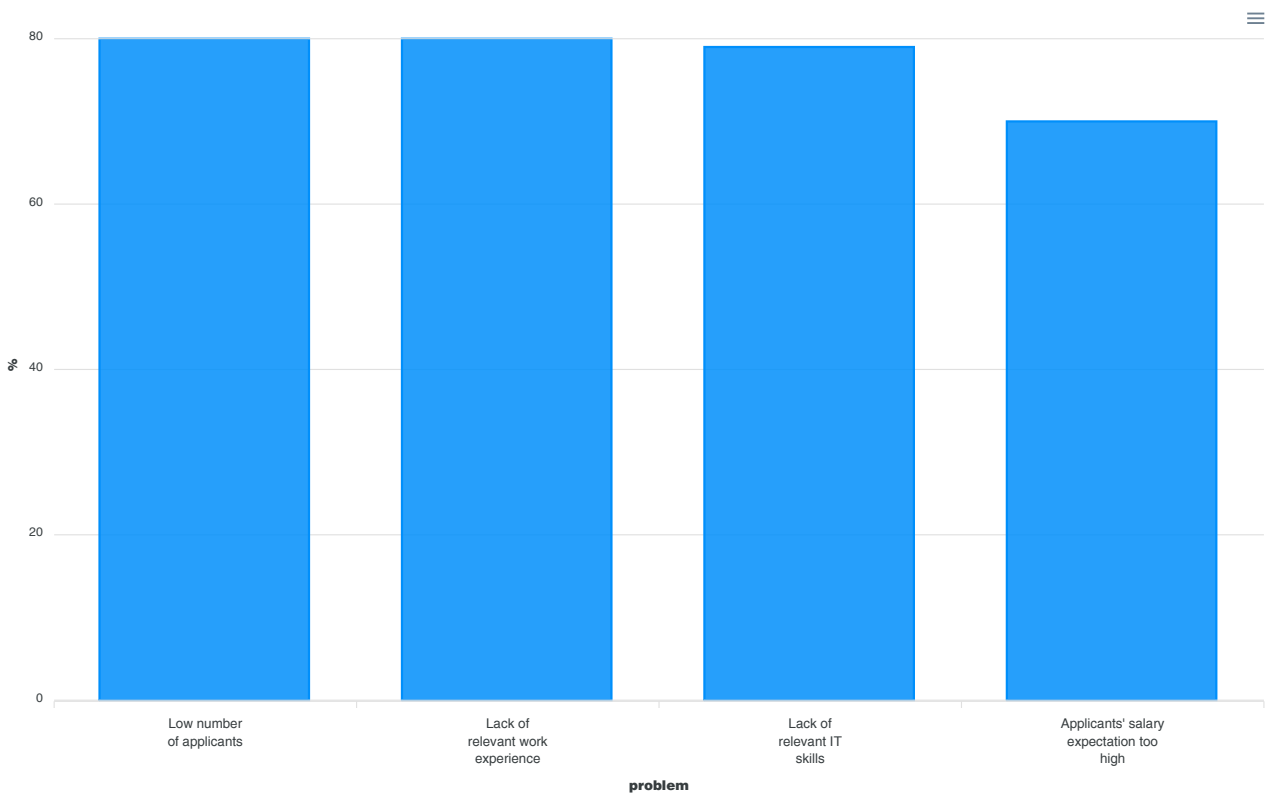
In the Republic of Croatia, the usage of computing resources via cloud computing services is developing; it was used by 42% of enterprises. The representation structure by enterprise size was evenly distributed between small, medium-sized and large enterprises, while graphic presentation shows that its usage was predominant in business activities, information and communication sectors as well as in service activities sector.

G-6 USAGE OF CLOUD COMPUTING SERVICES, BY SERVICE TYPE, 2024



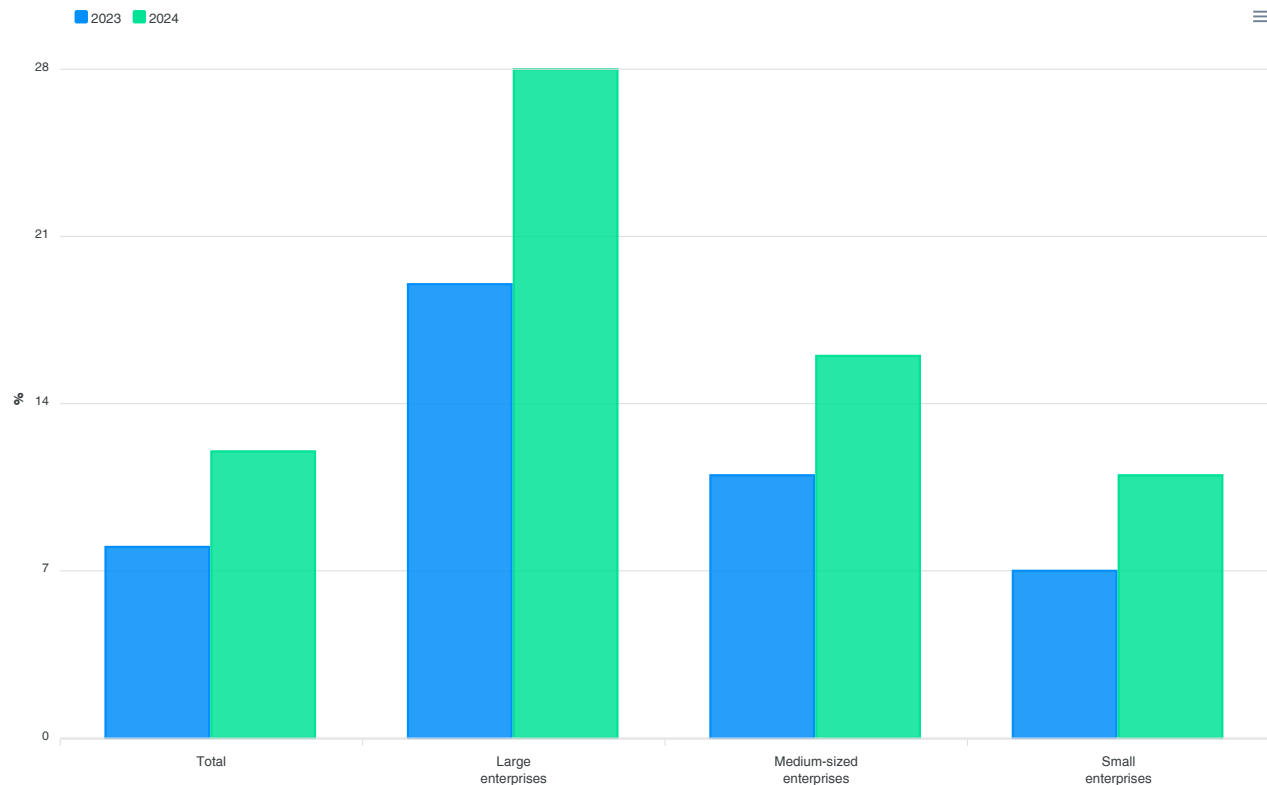
The classification by types of services shows that enterprises most often used cloud computing for e-mail processing, data storage, antivirus protection and usage of office software, while accounting software and database hosting services were somewhat less represented.

G-7 RECRUITMENT OF ICT SPECIALISTS IN ENTERPRISES, 2023



We also examined whether enterprises had IT specialists employed. IT specialists include staff whose main job is to design, maintain, develop, manage and support information systems in the enterprise. There were 16% of enterprises who stated they had IT specialists employed. In that connection, 6% of enterprises tried to employ new IT specialists in the previous year, but 53% of them had problems finding employees. The most common issues were a low number of applicants, lack of relevant work experience and lack of relevant IT skills among applicants.

G-8 USAGE OF ARTIFICIAL INTELLIGENCE (AI) SYSTEMS IN ENTERPRISES, 2024



We once again investigated the application of artificial intelligence in the business processes of enterprises. There were 12% of enterprises that declared that they used some of the artificial intelligence technologies. An increase in the application of artificial intelligence was present in all categories according to enterprises size. The application was most common in large enterprises, where every fourth enterprises used one of the technologies. The most used technologies were the analysis of written text, the generation of written or spoken language, the conversion of spoken language into a machine-readable format, and the data analysis using machine learning.

NOTES ON METHODOLOGY

Purpose of the statistical survey

The data shown in this First Release are estimates obtained through the IKT-POD Survey. This is an annual survey on the usage of information and communication technologies (ICT) and provides information on computer usage, usage of the internet, electronic commerce and other ICTs in enterprises. The data are an important source for conducting policies in the field of information society in the Republic of Croatia and in the European Union.

Legal framework

The IKT-POD Survey was conducted in 2024 according to Eurostat guidelines and on the basis of the Official Statistics Act (NN, Nos 25/20 and 155/23). Harmonised surveys were conducted in all EU Member States, and, therefore, the data are internationally comparable. The international data are available on the following web address: https://ec.europa.eu/eurostat/statistics-explained/index.php/Digital_economy_and_society.

Concepts and definitions used in the Survey are in line with the EU Methodology for Statistics on the Information Society, 2024, especially with Regulation (EU) 2019/2152 of the European Parliament and of the Council on European business statistics.

Observation units

The observation units are enterprises registered on the territory of the Republic of Croatia for performing the following activities according to the NACE classification:

Section C - Manufacturing

Sections D and E - Electricity, gas and water supply

Section F - Construction

Section G - Wholesale and retail trade, repair of motor vehicles and motorcycles

Section H - Transport and storage

Section I - Accommodation and food service activities

Section J - Information and communications activities

Section L - Real estate activities

Section M - Professional, scientific and technical activities

Section N - Administrative and support service activities

Section S - Other service activities (group 95.1)

The enterprises were also classified according to the number of persons employed:

- small enterprises (employing 10 – 49 persons)
- medium-sized enterprises (employing 50 – 249 persons)
- large enterprises (employing 250 or more persons).

Sampling frame and size

The basis for the sampling frame was the Statistical Business Register of the Croatian Bureau of Statistics. The sample consisted of 4 500 enterprises.

Data collection method

The data were collected via the internet by using the online questionnaire. The reference period for the main variables was the second quarter of 2024. For the questions concerning internet sales, the reference period was 2023.

Response rates

Out of the whole population of enterprises (14 460), there were 4 500 units taken into the sample. Out of the total sample size, 4 355 units were eligible and 2 971 enterprises took part in the survey. It means that the response rate was 66% and the eligibility rate was 97%.

Publishing

Total data were published for enterprises employing ten or more persons. The Eurostat publishes data of the EU countries for enterprises employing ten or more persons, which enables comparability of the data between the Republic of Croatia and other EU countries.

Definitions and explanations

Broadband technologies are technologies or connections that enable rapid transmission of data, especially films, games and video conferences via an internet network (e.g. DSL, cable connection, optical connection, leased lines, mobile internet).

ICT (information and communication technology) are software and hardware used for data communication (e.g. computer, fax, the internet, fixed mobile phone).

E-commerce means transactions conducted over internet protocol-based networks and over other computer-mediated networks. Goods and services are ordered via those networks, but the payment and the ultimate delivery of the goods or services may be conducted online or offline. Orders received via telephone, facsimile, or manually typed e-mails are not counted as electronic commerce.

EDI (electronic data interchange) is used for the electronic exchange of data, documents and orders inside an enterprise and between enterprises. Data interchange flows automatically between the computer systems of partners. Standard and encrypted forms are used.

The internet refers to networks of the following internet protocols: www, extranet via the internet, EDI via the internet, internet-ready mobile phones.

Cloud computing is a technology that enables data storage and data sharing over the internet. Data are stored on servers of a service provider, who also provides connectivity, data storing and data sharing services.

Website is a location on the World Wide Web identified by a web address. Collection of web files on a particular subject includes a beginning file called the home page. Information is encoded in specific languages (HyperText Mark-up Language (HTML), XML, Java) readable over a web browser such as Google Chrome, Mozilla Firefox, Opera, or Microsoft's Internet Explorer.

Artificial intelligence refers to systems that use technologies such as text handling, computer vision, speech recognition, natural language creation, machine learning or data analysis by machine learning to collect and use data to predict, recommend or determine the best activity to achieve specific goals. Artificial intelligence systems are divided into software (e.g., chatbots and business virtual assistants, face recognition systems, machine translators, machine learning-based analytical tools) and those embedded in some devices (e.g., autonomous robots to automate warehouse operations or production, autonomous drones for production control or package handling).

Abbreviations

CRM	Customer Relationship Management software
DSL	digital subscriber line
EC	European Community
ERP	Enterprise Resource Planning software
EU	European Union
Eurostat	Statistical Office of the European Union
Gbps	gigabit per second
IT	information technologies
Mbps	megabit per second
NACE	Statistical Classification of Economic Activities in the European Union
NN	Narodne novine, official gazette of the Republic of Croatia



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