# Cloud computing: the sky is the limit

#### What is 'cloud computing'?

Computing resources delivered over the Internet on-demand. A network of remote computers and servers makes up the 'cloud'. Customers can rent space on those machines to run their systems or can use applications built by the provider on top of that network. Cloud-based services include email, file storage, office software, productivity and collaboration tools, data analytics, web hosting, and much more.

*Edge computing* is an evolution of cloud computing, where the data storage and processing happens at a point closer to the source of the data, ie, on a phone or smart device.



Cloud services are commonly deployed in three ways:

End user

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Infrastructure as a service (laaS): fundamental computing resources such as processing, storage and networks, which can be used to build a system from scratch.



Platform as a service (PaaS):

provides the hardware and software building blocks for developers to create and run their own projects, ie, a mobile app.



Software as a service (SaaS): ready-to-use applications like email and productivity tools, which run on the provider's infrastructure and are delivered to the customer through an online interface.

## **Business-to-business cloud services**

Business-to-business customers can benefit from moving to cloud services in a variety of ways:







Cloud customers remain in full control of their data.



All rights and obligations of a cloud provider and its customer are governed by contractual agreement, often extensively negotiated.

# Cloud take-up by EU business



**36%** of companies in the EU use cloud computing services, but only half of those use advanced cloud services



75% take-up of cloud computing services, big data and Al by European business

## What are the advantages of moving to the cloud for businesses?



**Cost savings**: costs such as power and cooling, server maintenance and software licensing are eliminated. Cloud customers will only be charged for what they need and what they use.

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**Innovation and competitiveness:** Cloud allows businesses to innovate faster by focusing on what they know, rather than spending resources on managing infrastructure and data centres.



**Flexibility and scalability:** Cloud providers offer access to off-the-shelf tools and tailored solutions that improve business operations and productivity, while enabling customers to scale at will through pay-as-you-go subscription models, which are particularly important for start-ups and scale-ups.



**Security:** Cloud service providers' full-time job is to ensure high levels of data protection and security for their customers, in compliance with local regulations.

**Efficiency:** Cloud computing powers virtual services rather than physical products and hardware, and cuts down on paper waste, improving energy efficiency, and reducing commuter-related emissions.

## Why is cloud computing essential to Europe's digital future?



Artificial intelligence



Internet of Things



Optimised work processes



Reduced emissions and waste

1.1

Blockchain technologies

Enhanced competitiveness

## Cloud computing can also help tackle the challenges of our time:



Fighting climate change



Inclusive, efficient public services



Supporting the COVID-19 recovery

Our policy priorities: An open, risk-based, and harmonised policy environment

AmCham EU is dedicated to helping Europe build a trustworthy and transparent digital ecosystem, where European businesses are guaranteed choice and flexibility.

As providers of cloud services to businesses and governments across the EU, our members are committed to the success of our customers. For this:

- We encourage Europe to maintain an open approach to supporting cloud technology, one that encourages partnership with American cloud service providers.
- This should be underpinned by cross-border data flows and transatlantic cooperation on relevant policy matters.
- Policy initiatives aimed at cloud computing services should support a risk-based approach and provide predictability and clarity.
- We call for a clear, consistent and future-proof cloud rulebook, based on international standards and best practice codes of conducts.



Do you want to know more? DEC@amchameu.eu