



A Brief Introduction to Cloud Computing

🕒 READ TIME: 2 MINS

👥 AUDIENCE: BUSINESS & TECHNOLOGY

Cloud computing is a way of using technology where instead of having to buy, own and maintain physical data centres and servers, all these things can be accessed over the internet on remote servers.

These servers are maintained by what are known as cloud providers. The most popular ones are Amazon, Google and Microsoft. These providers also provide the ability to use the cloud to store data, run applications and even host websites.

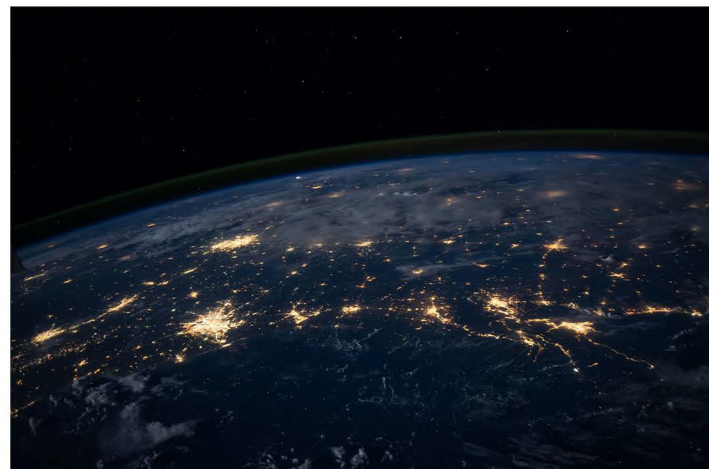
Cloud computing can be thought of as renting a house instead of buying one. Instead of buying and maintaining a personal computer, storage and servers, space and resources can be provided by the providers for as long as needed. Which massively reduces the cost and maintenance of the underlying technology.

WHY DOES IT EXIST?

Cloud computing has solved some issues created by traditional “on premises” approaches. Often the billing model of using cloud computing is pay as you go, this means the costs are correlated to the resources used. In contrast, using an “on premises” approach requires an upfront fee to install such storage, servers and other resources this is in addition to the

operating cost. Additionally, the infrastructure required for “on premises” approach is restrictive and does not dynamically scale well.

Moreover, in “on premises” approaches, a lot of space is needed to seat the servers while the cloud does not require much space. Another factor to consider is the requirement of a dedicated on-site team, required to manage system hardware and software in cloud computing set ups these things are managed by the cloud providers.



Cloud Computing

If an organisation has team members located around the world safely storing and sharing data becomes a very tedious task. Cloud systems provide a lot of tools and technologies that make it easy to safely share data amongst their members. Another added benefit of cloud providers and cloud computing is the regulated and consistent creation of data backups which can be extremely important within organisations.

TYPES OF CLOUD COMPUTING

Cloud computing falls into two main categories "deployment model" and "service model", respectively. The "deployment model" is divided into a further three sub-types known as "public cloud" "hybrid cloud" and "private cloud".

Public cloud is open to all, allowing everyone to store and access information through the internet which uses a pay-per-usage model. Public clouds, as opposed to private clouds, can spare businesses from the high costs associated with having to buy, operate and maintain on-premises hardware and applications. The cloud service provider is tasked with handling all system management and maintenance.

Private cloud provides cloud computing services such as software, networking and storage across the internet to a small group of customers. These services are often not available to the public because they are hosted in a private environment. Private clouds give business scalability and flexibility whilst allowing for more control, customization and security over their computing resources. It's important to note that a team of cloud engineers would be required in such organisations.

Hybrid cloud is a combination of the two previously mentioned types of cloud environment. In this case the system has essentially two parts, the private cloud accessible only by people within the business, and the public cloud, accessible by anyone who has access to the system.

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ABOUT US

Lancashire Cyber Foundry

The Lancashire Cyber Foundry runs a programme designed to support businesses facing cyber challenges in Lancashire. Digital Innovation support is part of this programme but there is also business strategy support available which includes specialised workshops to help businesses innovate and grow.

To find out more visit our website, <https://www.lancashirecyberfoundry.co.uk/> or email us at;

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