As you may have suspected, XaaS is an acronym, although in this case, the 'X' stands for 'anything'. So the whole idea of XaaS is 'anything as a service'. It is an extremely wide-ranging term that refers to any tools, applications, services, games, etc., which are delivered to your laptop or other device via the cloud, rather than obtained on-premises or in a physical format.

XaaS

- Software as a Service (SaaS)
- Platform as a Service (PaaS)
- Infrastructure as a Service (IaaS)
- Storage as a Service (StaaS)
- Database as a Service (DBaaS)
- Disaster Recovery as a Service (DRaaS)
- Communications as a Service (CaaS)
- Network as a Service (NaaS)
- Data as a Service (DaaS)

But there is even a criminal version of this type of delivery. Malware as a Service (MaaS) is a form of organised cybercrime where end-users subscribe to a service that provides them with malware to mount attacks.

benefits of XaaS

The primary benefit of using the XaaS model is a financial one.

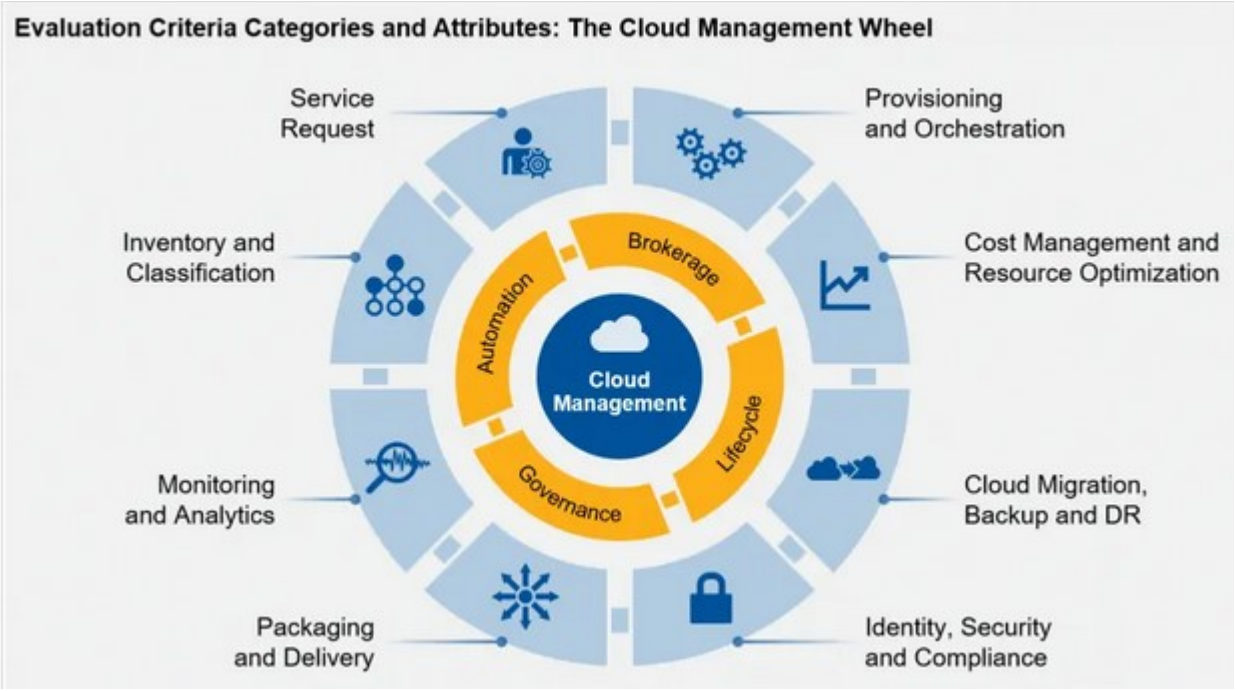
There is a reduction in the need for capital expenditure, as your focus shifts to operational expenditure, thus often reducing the total cost of ownership.

Scalability is perhaps the next most important benefit.

Different business models not only have varying initial needs but also needs that change over time.

The XaaS model also offers businesses extreme flexibility. If the market changes or if the needs of clients change, then it is easy to add on new apps or solutions to existing virtual packages.

startup businesses may have limited capital and who are able to customise XaaS to their needs at any given time.



Advantages

- **Financial savings and efficiency**.

Particularly important for small companies, the transfer of outgoings from capital expenditure to operational expenses can make a real difference to survival and growth.

- **Improved productivity**.

Using XaaS can avoid, or at least lessen, the effects of things such as network downtime.

- **Higher levels of cybersecurity**.

Small businesses and enterprises are a favoured target of hackers and cybercriminals. 28% of the breaches in 2019 Involved small business victims. Many businesses opt for lower cost cybersecurity measures that offer less protection. By using XaaS, you can have better security without exorbitant costs.

- **Agility**.

XaaS allows companies to be more responsive to client needs and market changes and allows them to access tools, software, and other solutions that they may otherwise find too expensive.

- **Growth**.

By reducing capital expenditure and enabling simple scalability, XaaS enables owners and managers to grow their business. With XaaS, owners will find it easier to identify and access the right technology and allow their salesforce to chase new business that may have been beyond their potential capacity.

- **Data**.

XaaS takes instinct out of the equation when it comes to making crucial business choices. Instinct can lead to bad decisions, but access to the relevant data means that informed decisions can lead to better results.

- **Relevance**.

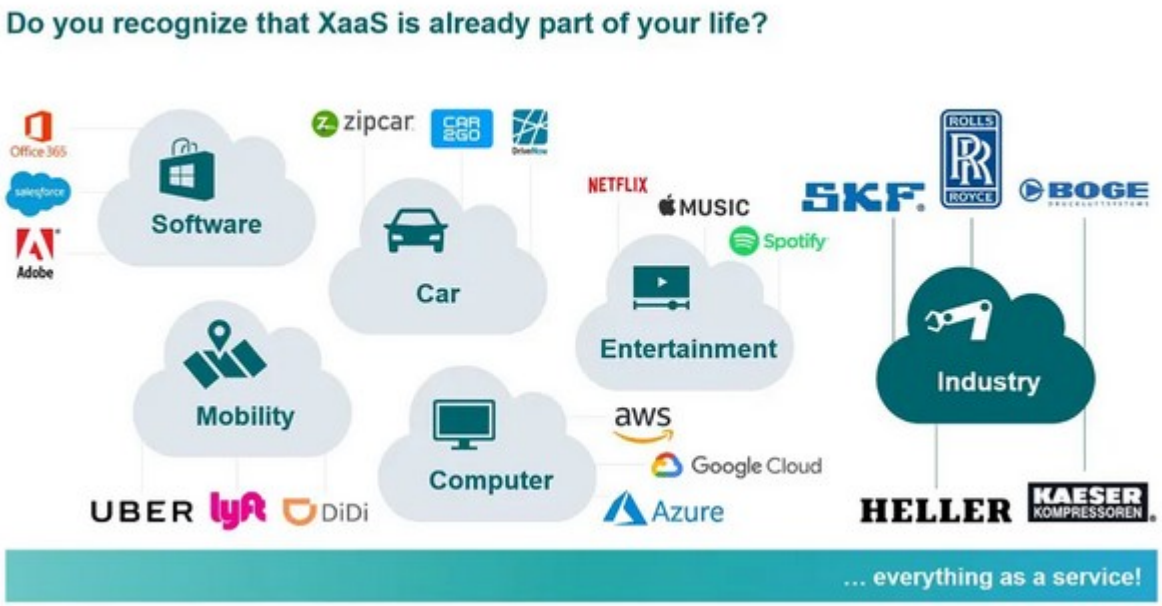
With constantly evolving technology and software, XaaS allows small businesses to stay relevant to market and client demands as new products become available.

- **Convenience**.

Many updates of XaaS-related systems happen automatically, thus saving time and money in checking, installing, and rolling out to employees.

- **Backup and Protection**.

Your systems and data are vital currencies in the world of business. Loss of data can spell disaster for your company. With XaaS and cloud computing models, your systems and data are protected in your own private cloud account. This ensures that disaster recovery is a simple process in the event of any incidents.



Disadvantages

So far, it all sounds perfect, but as with any process or system, there are some potential disadvantages to XaaS.

- **Downtime**.

We have all experienced some level of internet downtime and, even with XaaS, this is a potential issue that may arise. If your XaaS provider's servers go down then that will also affect you. Some XaaS providers may guarantee services through a service level agreement (SLA).

- **Performance**.

XaaS is becoming increasingly more popular and, as that happens, there can be issues with latency, functionality, bandwidth, etc. If you are running apps within a virtual environment, especially a public cloud environment, then they may also be affected.

- **Integration**.

As digital transformation speeds up and we move to increased levels of automation, there may also be some issues with integration – especially if your business is working across more than one cloud service.

- **Troubleshooting**.

While shifting many of your business components to XaaS relieves your own staff of many of their regular tasks, if issues do arise then it may be harder for your IT staff to troubleshoot the problem. Provisioning for those staff to stay up to date in the technology may lessen any impact.

Examples of the service

Hardware as a Service (HaaS)

This is similar to the way in which a business might lease vehicles instead of purchasing outright. The provider owns the hardware and installs it on the client's site. This allows clients to utilise hardware they may not be able to afford to purchase, and is especially beneficial to small and medium-sized businesses.

Communication as a Service (CaaS)

Communication is one of the most vital tools for many businesses. By using CaaS solutions, it allows a business to access a variety of communication tools and applications as needed. These can include VoIP technology, virtual conferencing tools, and more. The business pays only for a subscription, sometimes based on the time they use these tools, making it highly cost-effective.

Desktop as a Service (DaaS)

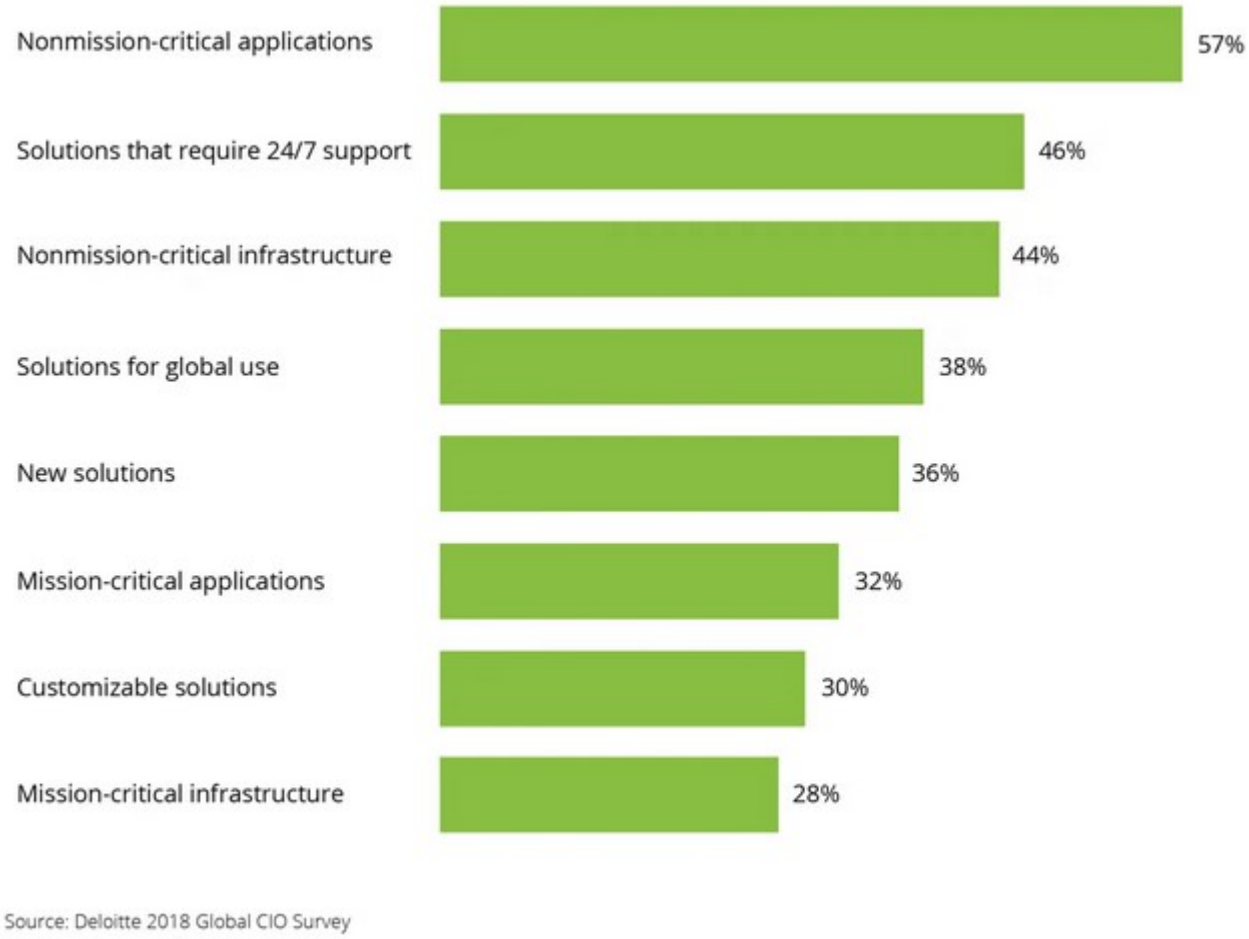
There are times when your staff may need to compute tasks that are beyond their PC or laptop's abilities. DaaS allows them to access greater computing capacity from a third-party server.

Healthcare as a Service (HaaS)

The healthcare sector is becoming increasingly digitised. By integrating HaaS into your practice or your hospital, you allow for easier sharing of crucial information, online consultations, prescription deliveries, and other vital services.

Cloud Application

Cloud application refers to any software that's deployed in the cloud, rather than hosted in a local machine or server. Cloud application usage is widespread across companies big and small.

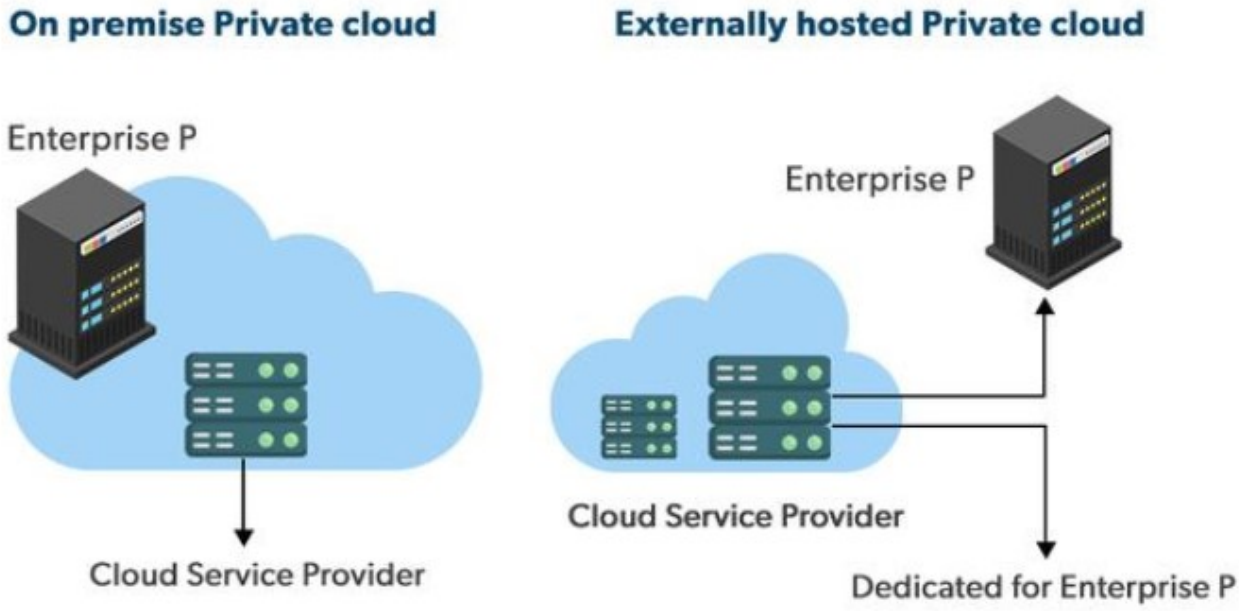


Source: Deloitte 2018 Global CIO Survey

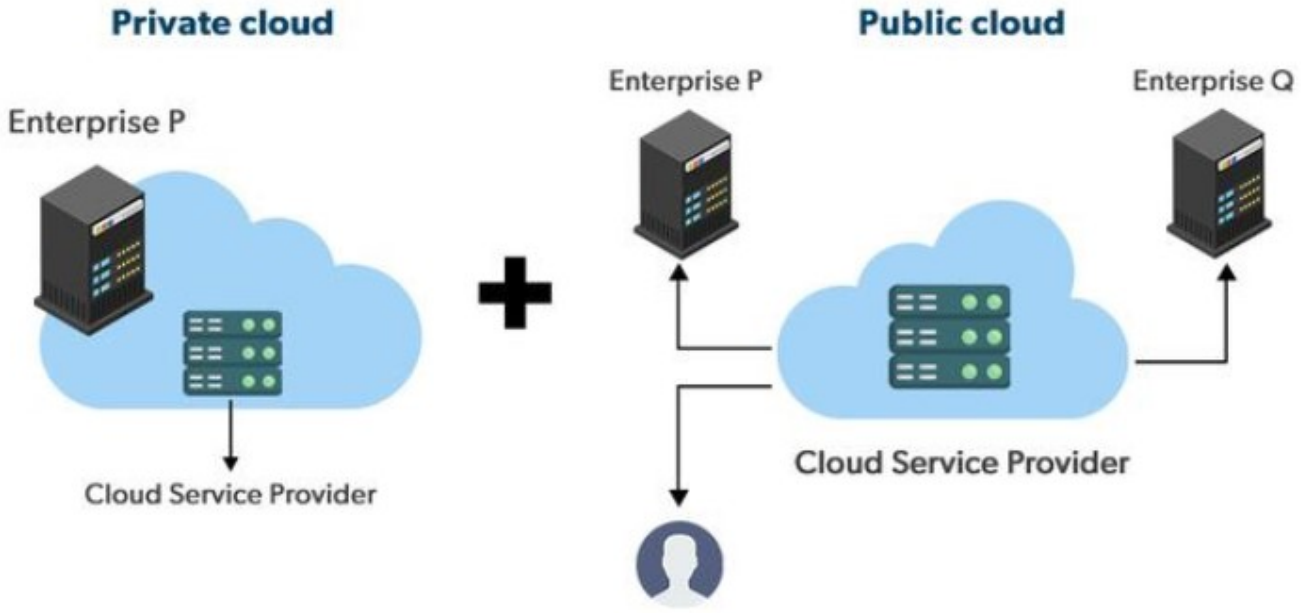
Cloud Applications Vs. Desktop Applications

Desktop applications are platform-dependent and need separate versions for each operating system. Since they require multiple versions, this increases the time and cost to develop them and makes testing them more complicated. It also makes version control and supports more difficult.

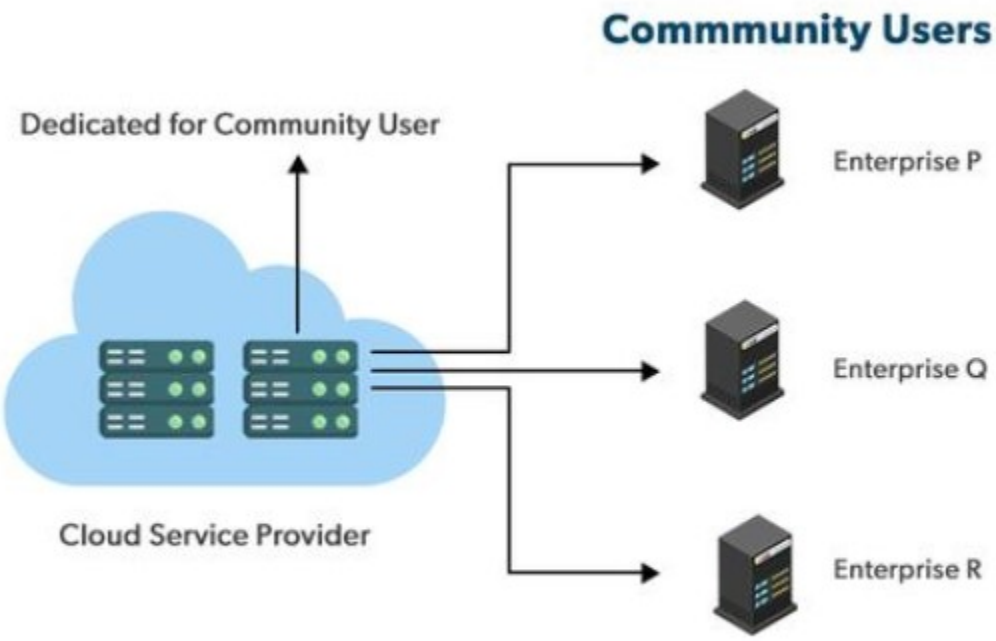
On the other hand, you can access cloud applications via multiple devices and operating systems. The fact they are (mostly) platform-independent makes them more cost-effective in the majority of cases.



Private Cloud



Hybrid Cloud



Community Cloud

Sectors that use community clouds are:

1. **Media industry:** Media companies are looking for quick, simple, low-cost ways for increasing the efficiency of content generation. Most media productions involve an extended ecosystem of partners. In particular, the creation of digital content is the outcome of a collaborative process that includes the movement of large data, massive compute-intensive rendering tasks, and complex workflow executions.

2. **Healthcare industry:** In the healthcare industry community clouds are used to share information and knowledge on the global level with sensitive data in the private infrastructure.

3. **Energy and core industry:** In these sectors, the community cloud is used to cluster a set of solution which collectively addresses the management, deployment, and orchestration of services and operations.

4. **Scientific research:** In this organization with common interests in science share a large distributed infrastructure for scientific computing.