Cloud Computing

Cloud Computing simply means using IT services where the software and hardware is accessed via the Internet.

Cloud Computing can be a natural progression in business IT operations. This is because it offers cost savings and simplifies the process of building and maintaining IT infrastructure and services. Why would you keep server computers, software licences and so much more - when you can simply outsource that to your Internet Cloud provider.

Some businesses move their IT operations to Cloud Computing in one go but many do this on a piece by piece basis to make the transition easier.

What are the benefits of Cloud Computing for Small Business?

- 1: Cost savings
- 2: Easy to manage and easy to increase / decrease the level and range of IT services provided.
- 3: Reliable and secure IT services

Typical Areas where Cloud Computing is relevant

Email and Collaborative working

If you use Hotmail, Yahoo mail, Google mail or anything similar then you already use Cloud services. You don't need to worry about where your emails are stored, whether there are regular backups and when the next upgrade is needed. It's all hidden from you – in the Cloud. You just use the email service as and when you want to 24 hours a day 7 days a week

Application Delivery - Software as a Service

Most small businesses need IT services and until recently that has meant buying computer equipment, software and maintenance. Now it's easier to just buy the service you need and not bother about server computers, power supplies, maintenance etc. Instead of buying the software your business needs, you can have the software available from the Cloud. You may need CRM, accounting, financial modelling etc. The software runs in your browser. This is often called Software as a Service (Saas). You pay for using the software rather than buying it. This means that installation, upgrades etc. are all done automatically for you.

File and Data Storage (Cloud Storage)

Storing documents and data on the server computers in your business means you have to deal with backups, security and disaster recovery. Storing documents and data in the Internet Cloud (known as Cloud storage) means you can access from anywhere and that backups, security and disaster recovery are taken care of.

In the Cloud, you just pay for the amount of storage that you use and you don't need to know where it is or how it is stored. If you already have server computers for storage then the Cloud can simply be used to backup that information.

These services are typically paid for according to the volume of data stored with the provider. Such services are quickly replacing the need for businesses to buy and manage file servers, network attached storage devices, or removable hard drives.

Hosted Desktop Computing

A Hosted Desktop looks and behaves like just like a normal desktop PC, but the applications and data are stored and delivered online from secure data centres.

Hosted desktops can be fully configured with the relevant business applications and user environment required on an individual or company wide basis. They can also be connected to a Hosted file, application or database servers replacing the need for on-premise server equipment all together. All the common business applications can be installed on a hosted desktop or delivered as service to the hosted desktop as required and local devices such as printers and or USB equipment can all be connected and used via Hosted Desktop Session.

Hosted Servers

It is difficult to predict the power and size of servers that a business will need. With hosted servers, you simply specify the software and services that are needed and the servers will be set-up accordingly. If more power or disk space is needed at any time then it is simply arranged.

Business Continuity and Disaster Recovery

How do you keep the IT systems running if your business has a power outage or is flooded for example. With traditional PCs and servers, this can be a real problem but if your applications are in the Cloud then they will still be available to use from any Internet PCs anywhere. Do the Cloud computing providers have plans in place to cope with disasters? Yes they put a lot of effort into ensuring they can keep running whatever happens and that means your business can keep running.

Common areas of concerns with Cloud Computing

Internet Connectivity

A common concern with Cloud computing services is the reliance on Internet connectivity. "What happens if my internet connection goes down?" is a common question.

Internet connectivity is now relatively fast, stable and reliable and connectivity issues are rare with the mainstream quality providers. Companies that cannot tolerate any loss of connectivity to their Cloud Computing services can easily implement a connectivity failover solution via the use of a second Internet connection which can be set up to be automatically used if the primary line goes down. This second line can even be a mobile connection.

When a company uses Cloud Computing services then, in the event of an Internet connectivity issue at one location, they can go to any other location and work on any computer with internet connectivity and all their data and applications are then available as normal as if they were in the office. This can't be said of an onpremise solution.

Security

Another typical concern with Cloud Computing is "How safe is my data?" Generally speaking, data is safer and more secure being managed and stored by an expert IT service provider than internally on your own equipment.

Cloud computing providers invest considerably in highly secure and redundant infrastructures which are managed by experts to ensure safety and security of their customer data. Data is stored and protected using high grade equipment which is often not financially viable for small businesses to purchase. Using the benefits of economies of scale they share these enterprise class resources with their customer base.

Changing from current infrastructure to Cloud based infrastructure

Transitioning to Cloud computing is typically straightforward as the services are deployed to a business's employees via an internet browser without any requirement for purchasing equipment or installing applications or configuring on-site local infrastructure.

All that is usually necessary to start using the service is to perform some basic set up tasks to configure the solution to individual business requirements which the service provider will assist with. A data transfer test service is often provided in the first instance to confirm the suitability of the service for a customer. The Cloud Service Provider will then typically provide help and assistance with setting up the new service and moving data from a previous solution.

Is Cloud Computing right for my business?

If you think that cloud computing could benefit your business, these are the key areas to look into:-

1: How and where can Cloud Computing fit into my business?

Don't just assume that replacing all your in-house solutions with a cloud computing alternative will automatically transform the business. It's important to look at exactly where cloud computing can add value – whether for email, improving access to your customer information, or providing secure data storage, backup and access. Look to use a partner that specialises in Cloud Computing provision who will work with you to assess how cloud computing can best work with your current IT setup and requirements and can provide a range of different services.

2. Prepare your company for the change to Cloud Computing

As with any technology implementation, educating staff on the impact of cloud computing will be critical to its success. Many vendors offer technical support and user training for staff to ensure they get the best from their experience and that they understand the full potential of the technology.

3. Choose the right applications

There are literally thousands of cloud computing applications and services to choose from and many can be customised around your existing business processes. It could be tempting to pick out a whole host of 'nice to have' software programmes, but if they're not going to demonstrate an improvement against existing business processes, then they could simply frustrate your staff. The best approach is to sit down with a cloud partner who will help you work out the right solution for your business.

Internet Cloud technologies and services can be a big benefit to small business in making their IT operations cheaper, more robust, available anywhere and scalable.