



Using the Cloud:

A Quick Guide for Small and Medium Businesses

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What is the Cloud?

Although we have been hearing about 'The Cloud' for the last few years there is still some debate and uncertainty as to what is actually meant by the term.

Wikipedia describes the cloud as "a colloquial expression used to describe a variety of different types of computing concepts that involve a large number of computers connected through a real-time communication network such as the Internet". Still none the wiser?

In basic terms the cloud provides services that would traditionally be installed on your computer, mobile device or your local IT network. For example, when you 'backup to the cloud', rather than your device's data being stored on a backup tape or hard drive it is sent over the internet and stored on a computer system owned and managed by someone else e.g. Amazon or Microsoft.

The cloud not only offers backup type services. It can provide pretty much anything you can think of that you use in your traditional (locally based) IT environment, from storage to applications to full 'virtual' servers.

Cloud services can come by other names too. Software as a Service (SaaS), meaning hosted applications such as email or ERP applications, and Infrastructure as a Service (IaaS), meaning servers, hardware and storage provided as a hosted service.

Common Cloud uses for SMB's

There are good uses and bad uses for the cloud in the SMB environment but here are just a few examples where you could benefit from moving to a cloud service –

- **Data Backup** – By replacing disk or tape backups with a cloud service your data is transmitted off-site and held in a secure, highly available location, freeing you from management and costs of backup hardware, software and media. This also removes the possibility of human error and of backup systems failing.
- **Disaster Recovery** –DR traditionally meant having a duplicate set of critical systems in an alternative location just in case a disaster struck. This is obviously very expensive and often difficult to maintain. Using the cloud, a virtual set of disaster recovery systems can be brought in to life in the event of a disaster and made accessible from anywhere you have internet access at a fraction of the traditional cost.
- **Email** – Cloud based email hosting is rapidly becoming the recommended approach for small to medium size business email systems. Instead of your email client (Outlook etc.) connecting to a locally based mail server, the mail server is moved to the cloud, offering all the same functionality - but without the costs - of managing your own mail server, and providing true High Availability for your email.
- **Storage / Archive** – cloud providers have huge data storage facilities with ever expanding space for data. By using their storage rather than local file or archive servers you can benefit from their economy of scale. Additionally, the remote nature of the service means your data

can be made accessible to various locations a lot simpler that it would be with a local file server. The inherent high availability nature of cloud storage solutions is also a significant benefit.

- **Virtual Servers** - Hosted virtual servers can provide much needed additional hardware resources without a high initial investment. Virtual servers can be used in place of any servers you have, but are particularly suited to servers that are accessed externally, such as webservers, intranet servers, or mail servers. Virtual servers actually differ very little from traditional servers but they are hosted with a cloud provider on their infrastructure and accessed from your own network over a secured connection.

Why use the Cloud?

Cost: As you read this you may be seeing that the cloud can provide reduced costs by removing the need to purchase your own hardware and software as well as simplifying the management required for running these services.

Availability: This is a key area where cloud services have an advantage for the SMB. Implementing a high availability system in-house can be costly both in hardware and setup costs as well as on-going maintenance. All reputable cloud service providers will be running their systems on very high availability infrastructures, so they are always online for their customers. Cloud services therefore inherently offer an outstanding level of availability that would otherwise be out of reach.

Scalability: Another area that is made much simpler - and cheaper. For instance if you outgrow the size of a cloud service and need to expand (e.g. more mailboxes, more storage, more server processing power) it's a simple case of asking for more resources to be allocated. The provider will make some quick updates to your cloud infrastructure and away you go. No need to purchase more servers or licences and no need for large and costly upgrade projects.

Environmental Impact: Being green is something that we should all be doing. By using the cloud to run your services they are running on a virtualised infrastructure, meaning that there are usually several systems running on one set of physical hardware using technology called Hypervisors such as VMware or Hyper-V. This means that there is much better use of the available 'compute power' that the hardware can provide while reducing space taken up in a data centre, power consumption and cooling requirements; all of which lead to a more environmentally beneficial and cost effective way to run these services.

Cloud Concerns

The cloud may not always be the best way for a business to run its IT services. Having parts of your IT infrastructure or data offsite, and possibly in a different country, could raise concerns.

Internet Connections: A robust and adequate speed internet connection is a must. Without a good connection to your cloud services you risk them being unavailable or unreliable. Luckily in the UK most locations now have some form of high speed internet connections available.

Control: Handing over an in-house service to a cloud provider does reduce the control which you and your IT department have over it. There may be some tasks that were previously quickly performed by an IT administrator that now need to be passed to the Technical Support team of the cloud provider to perform. Most day-to-day tasks however should still be straightforward and accessible through a web based admin console for example. But if you do require a high level of control over a service perhaps the cloud is not the best solution.

Ownership of Data: With your data held elsewhere and in the hands of another company it would be right to have concerns over ownership and who can do what with it. With any reputable cloud provider there should be contractual agreements stating that the data is still the property of the business and defining what rights the cloud provider has over it. This can be particularly important if you are using an overseas provider as local laws may vary. Data encryption that only your business can decrypt is a safe way to ensure privacy of your data. Some providers can offer 'Cyber Risk Insurance' that can cover any theft or misuse of your data while in the cloud.

Support and Service Level Agreements (SLAs): As with any important technical service you will need to have a satisfactory level of support and clear service level agreements that cover your cloud services. Again, most reputable cloud providers will have these in place, but it does not hurt to find out before choosing a provider.

Conclusion: The cloud can offer significant cost, reliability, security, and performance benefits to SMBs. On the other hand, it can have both commercial and technical pitfalls if you venture into it without knowing what you are doing.

Greystone Consulting

At Greystone we have been using various cloud services for several years to great effect for our clients as well as ourselves. We have also been providing consultancy to our clients on selecting the right cloud services and migrating to them. We have several partnerships with UK based cloud service providers and are well placed to advise businesses on cloud services and ensure they get the best value.

If you would like further information or to arrange a free consultation please contact us

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