

Cloud Computing – A Small Business Guide.

Whilst more and more small businesses are adopting Cloud Computing services, it is fair to say that most small businesses are still unsure of what Cloud Computing is, how it relates to their specific business sector and most importantly are unsure as to how it can benefit them. This guide hopefully provides this missing information and provides a simple and easy to understand guide to Cloud Computing for small business.

What is Cloud Computing for Small Business?

Cloud Computing simply refers to IT systems and resources that are accessed via the internet rather than from equipment that a business has to purchase setup and manage themselves. Cloud Computing allows a business to use IT as a utility, delivered as a service by a service provider and paid for according to usage in a similar way as their phone or electricity bill. Cloud Computing is also often referred to as “Software as a Service” or “Hosted IT Solutions”.

What are the benefits of Cloud Computing for Small Business?

There are many benefits associated with Cloud Computing compared to an on-premise IT solution including substantial cost savings, minimal capital outlay, always up to date services, minimal management overhead and the flexibility to scale up and down as required. Let’s take a closer look at some of these benefits of Cloud Computing in comparison to managing an “on-premise” IT infrastructure.

1: Cost savings

With Cloud Computing a small business no longer needs to buy or lease expensive computer equipment such as servers and backup equipment or buy costly software such as operating systems and applications to deliver IT resources to its employees. Using Cloud computing services also reduces the need to employ technical staff or to engage an IT support company to manage complex in-house equipment. Savings vary from business to business but “Total cost of Ownership” savings in

2: Ease of management

Cloud Computing also simplifies the management of IT for a small business by providing them with fully managed, hassle free IT services. Any support needs, service issues or requests for change are simply reported to the service provider who is then responsible for fixing any problems or undertaking configuration changes as part of the standard subscription fees and according to a Service Level Agreement (“SLA”). Many Cloud Computing services also come with simple to use administration control panels to allowing easy and simple changes to be made quickly by customers without needing to contact the service provider.

3: Safe, Secure and reliable IT delivery

The cost and complexity of providing backup, security, fail over, high availability, business continuity or disaster recovery to an “in-house” or “on-premise” IT infrastructure solution is often simply just not possible or affordable for most small businesses leaving them exposed and at risk . In comparison, Cloud Computing services are usually provided with guaranteed service level agreements, typically 99.99%, and the service provider ensures that the services are always available.

With Cloud Computing your data is held in highly secure data centres with data being replicated in real time and automatically backed up providing peace of mind that data is safe and secure

In which areas of SME business is Cloud computing relevant?

So, as we have seen the benefits of a Cloud Computing model of IT delivery are numerous but what specific areas of Small Business IT are suitable to be accessed via a Cloud Computing delivery model? Let's answer the question "How does my business use Cloud computing" Let's look at a few examples of common small business requirements.

Email and Collaboration

Email is perhaps the best known Cloud Computing service of all. If you have ever used a Hotmail, Yahoo, or Google email account then you have already used a consumer based Cloud Computing email service.

Historically, to provide staff with business class and fully functional email systems, businesses have had little choice but to run their own in-house email servers, such as a Microsoft Exchange Server which are complex, costly and have high support overheads.

Cloud based business class email services such as Microsoft Hosted Exchange or Google Apps Premium Edition now provides enterprise grade email capability to business both large and small at a fraction of the costs of in-house solutions. These services are delivered as fully managed services by Cloud Computing providers who handle all the initial setup requirements, the transition from in-house solutions and offer full on-going support for their solutions. Using these services businesses can take advantage of sophisticated email and collaboration services with the peace of mind that they are always available, secure and fully backed up.

Application delivery – Software as a Service

Most small businesses have the need to deliver applications to their employees. The types of applications needed are dependent on the nature of the business but most businesses share a common set of base level requirements. These include applications such as word processing, spreadsheets, presentation software, accounting packages, CRM and more. Most businesses will also typically have a line of business application specific to their industry.

Cloud Computing provides an online alternative to the traditional "Buy, Install and Manage" method of application delivery. This is commonly referred to as "Software as a Service" or "SaaS" where applications are delivered via an internet browser.

With SaaS, software is updated automatically by the service provider so the latest versions are always available and there is no need to manually patch and update the software. Cloud based applications also benefit from being increasingly integrated with mobile devices allowing access to business data and applications from mobile smart phones.

File and Data Storage

Traditionally, for the majority of small businesses, business data has always been stored on computer equipment based at the office. This data could be stored on PC's or on a network server or device allowing the data to be shared between multiple users. Storing data in this way has meant that small businesses have always been fully reliant on their own equipment and their ability to manage this equipment, internally or via a partner, to ensure their data is safe, backed up, and always available.

The Cloud Computing alternative is known as "storage as service" or "Cloud Storage", providing

small businesses with online storage capacity. 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.

For those businesses that have already made an investment in local storage, Cloud based online backup services can provide a simple and low cost means of automatically backing up this locally stored data to an off-site location and replace the need for manual and labour intensive tape or disk based backup regimes.

Hosted Desktop Computing

For small businesses the standard way of delivering IT capability to employees has always been to provide them with a personal computer with all the relevant applications installed and for these computers to be connected to an office based server(s) for file storage, email capability and shared resources. This has typically required heavy investment in expensive full specification PC's, server, networking, and backup equipment. All this on-site equipment then needs to be managed, maintained and supported either internally via in-house technical staff or outsourced to an IT support provider which only adds to the total cost of ownership of IT.

Cloud Computing providers can now deliver alternatives to the method of IT delivery by providing services known as Hosted Desktops or Virtual Desktops. These are typically used in conjunction with cloud based file storage, email and application delivery services.

Hosted desktops remove the need for 'traditional' desktop PC's in the office environment and offer numerous advantages in terms of cost savings, security, resilience, flexibility and reduced management overhead. 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 line of 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 a 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

Hosted Servers replace the need for on-premise servers and can provide the same roles and functionality provided by on-site servers such as centralised data storage, a means of enforcing permissions based access to company IT resources, or delivering an application or database. They do this without the need for upfront capital expense, energy costs, management and support overhead of on-premise servers.

Hosted servers are typically backed up daily, so small businesses don't have to worry or manage this in-house, and are fully managed with updates, patches, and antivirus protection. They can be connected to either Hosted Desktops or to normal physical PC's via secure online connections as required.

Many companies currently utilise Microsoft Windows Small Business Servers to provide centralised IT functionality. Hosted Servers in conjunction with Cloud based Email services can replace the functionality provided by such servers all together providing a simpler, more cost effective and more

reliable solution.

Business Continuity and Disaster Recovery

One of the biggest concerns typically associated with "on premise" small business IT delivery is how does a business continue to function if there is an unexpected event such as power failure, fire, flood, break in or even just lack of access to the office. Delivering a full IT business continuity solution to an on-premise solution is complex, expensive and often just not practicable for most businesses leaving them exposed to such events.

Cloud Computing solutions are accessible via the internet from anywhere and are therefore not reliant on equipment physically located at a business premises. As such they provide an inbuilt low cost remote access, disaster recovery and business continuity solution to businesses giving peace of mind that applications and data are always available from any location.

Cloud computing providers also make considerable investment in data centre infrastructures so as to ensure constant availability of their services. This includes technologies such as real time replication of data to multiple data centre locations and fail-over hardware solutions so they are not dependent on any one physical device. In addition the data centres themselves have multiple redundant power suppliers and multiple internet connections. Replicating the sort of data centre environment used by service providers to ensure availability of services is just not within the means of small business.

Common 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.

Firstly 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. Other options are to use a temporary 3G or mobile internet connection which can again be configured to be used only if the primary connection is not available which is a great solution in the case of a physical ADSL or Cable line issue.

Of course, when a company uses Cloud Computing services, in the event of an issue at one location, they can also 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 on-premise solution.

As a summary the benefits of Cloud Computing Solutions combined with easy and low cost ways to provide failover internet connectivity provides an overall more reliable solution than on-premise IT.

Security in the Cloud

Other typical concerns with Cloud Computing revolve around “How safe is my data?” We would propose that your 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, 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 to their customer base. Whilst this means that a small business would be using a shared IT platform their own specific business data is held in isolation from other customers ensuring its security and confidentiality.

The transition from locally owned 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. Often an initial free trial or 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 transitioning data from a previous solution.

Is Cloud Computing right for my business?

If you think that cloud computing could benefit your business, make sure you’ve addressed these four considerations:

1: How and where Cloud Computing can fit into your 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 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.

Conclusion

We hope that you have found this guide useful. Cloud Computing is a natural evolution of business computing driven by the increasing availability of fast and reliable internet connectivity and the ability to share data centre based infrastructure. Certainly, Cloud computing can offer numerous benefits to small businesses if used in the right way and can now be used to provide the majority of IT resources commonly required. It must be said that small businesses with highly complex and bespoke requirements may have difficulties in finding a Cloud Computing alternative to locally owned and managed systems.

Rather than moving wholesale to the Cloud in one big leap, most businesses will move slowly in this direction by incrementally adopting specific Cloud Computing solutions alongside their existing in-house systems. Certainly businesses who have made investment in local infrastructure will seek to achieve a return on these investments prior to adopting alternative solutions but may assess Cloud based alternatives due to changing business requirements or when equipment replacement is in order.