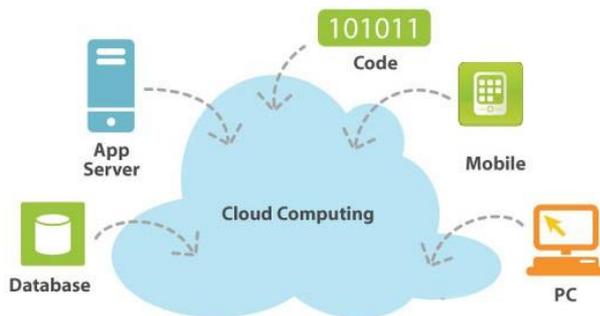




Quick guide: Using the Cloud to support your business

This Quick Guide is one of a series of information products targeted at small to medium sized enterprises (SMEs). It is designed to help businesses better understand, and take advantage of, new information technologies. The focus of this Guide is on Cloud Computing solutions.

What is Cloud Computing?



Cloud Computing

Cloud Computing is the use of third-party software, storage or infrastructure that can be accessed by multiple users over the Internet. Cloud Computing uses Internet technologies to reduce in-house IT overheads. Cloud Computing is characterised by the following features:

- Accessing computing resources as services, instead of products that are purchased, installed and managed within an organisation/business
- The ability to rapidly scale computing resources to match fluctuations in business demand (up and down)
- Utility-based pricing. Users only pay for computing resources actually used and they can monitor usage.

Main types of Cloud services

There are different types of Cloud services. The two main ones are Public Cloud and Private Cloud.

1. Public Cloud:

The cloud infrastructure is made available to the general public or multiple organisations on a shared basis. It is typically owned by a provider selling cloud services.

2. Private Cloud:

The cloud infrastructure is operated solely for an organisation. It is managed by the organisation or a third party and may exist on or off premises.

Cloud Computing is not new

Examples of Cloud services commonly used by individuals and businesses include Google Apps, Salesforce.com, Hotmail, Facebook, LinkedIn, Dropbox, eBay, Skype, etc. Over the last couple of years, Cloud Computing services specifically targeted at business have grown rapidly and are becoming a popular alternative to businesses managing their own IT, in-house.



Potential Benefits of Cloud Computing Services

The potential benefits to businesses that use Cloud Computing technology include:

- **Reduced up-front costs**

No need to procure, install and configure hardware or software.

- **Pay only for what you use and pay as you go**

Users only pay for the services they use and costs are spread out over time.

- **Access to enterprise strength security infrastructure**

Security infrastructure is continuously updated and threats monitored

- **Decreased downtime and delays – Improved business continuity**

Eliminates concern of internal hardware/software crashing. Cloud services typically guarantee available network connectivity.

- **Fast deployment. Faster to market.**

Traditional IT systems take time to implement. Cloud solutions can be deployed within days or hours.

- **Ability to scale IT capability quickly**

Computing capability can be rapidly expanded on demand. This is important for businesses with variable workload or where technology capability needs to support business growth.

- **Ability to access industrial strength applications and services**

SMEs can access sophisticated IT resources that would otherwise be unaffordable. This helps to level the playing field between SMEs and big business.

- **Increased accessibility and portability**

With a connection to the Internet, users can access data and tools from anywhere, anytime, using a multitude of different devices.

- **Business flexibility and agility**

SMEs can respond more rapidly to changing technology trends without having to invest in new IT solutions and infrastructure.

- **Reduced need for in-house IT expertise**

Cloud service providers keep systems maintained, reducing the need for an internal IT department or specific IT expertise – thus reducing cost.

- **Improved productivity**

With routine IT and network management performed by the service provider, businesses can free up resources for other business tasks.

- **Innovation**

Cloud Computing can provide access to technology capability to support development of innovative new products, services and business models.

- **Potentially reduced carbon footprint**

More efficient use of computer hardware requires less electricity and air conditioning.



Why is Cloud Computing important?

Cloud Computing is the next phase in the evolution of computing. It has the potential to reduce the cost of setting up, operating and maintaining computer and communication systems and means businesses can focus on their business – not IT.

Cloud Computing has the potential to transform how businesses operate. It can positively improve the economics and business models of companies; provide otherwise unachievable computing capability and capacity; and free up resources to focus on the business and innovation. Given the speed with which business and technology changes, Cloud Computing enables businesses to be more responsive and agile, adapting their business to new trends and opportunities to drive innovation within their business.

Issues to consider when thinking about Cloud Computer service options

Cloud Computing technology offers both time and financial benefits which make it a good fit for businesses. However there are also issues that businesses need to be aware of and manage to leverage the full potential that Cloud Computing promises. Consideration of these issues is required when contemplating any new business initiative or project.

Privacy and Security

Businesses must have confidence that their data is secure and that their privacy and that of their customers is properly managed. This means having assurance that the Cloud provider has both the infrastructure (encryption, firewalls, authentication and authorisation mechanisms) and policies and procedures in place to guarantee that a business's data is only accessible by authorised personnel within the business.

Businesses need to be aware that in some cases, it is a requirement that the data they store in the Cloud is hosted in a facility located in Australia (e.g. a customer's personal information). Businesses also need to be aware of their own privacy obligations and ensure the protections offered by a Cloud vendor enable them to meet these.

Quality of Service

Businesses need to ensure that the service they receive from a Cloud vendor enables them to meet the service quality expectations of their customers, i.e. service reliability and availability, access to data when required, privacy and security.

Data access, interoperability and portability

Businesses must have assurance that they can access their data, retain and move it if required (e.g., if they wish to move to a different vendor). If this is not possible, businesses risk being 'locked in' to vendors that no longer meet their needs, who fail to remain competitively priced or who have a poor performance record.



Managing potential risks

The implementation of any new IT system raises potential risks that need to be managed. Moving to Cloud technology solutions is no different. From a practical perspective, there are a number of issues that need to be clarified with the Cloud vendor.

These include:

- **The process of transitioning existing software and data to the Cloud**
 - How easy/difficult is this? What costs are involved? Do you need to do anything with your data to prepare for the migration? Will this incur additional cost?
 - Can the product be customised if the business has some specific requirements?
 - Can the product be integrated with other third party software (e.g. financial or customer relationship management products) you already use?
- **Is there a clear contractual or service level agreement in place? What are the details?**
 - Does the contract 'lock' you in to the vendor?
 - Do you retain legal ownership of your data?
 - Are the performance measures of the vendor clear and adequate?
 - Are payment terms and conditions transparent?
 - Do you have the ability to transfer to another service provider and take your data with you if you chose to – at any time?
- **The level of service performance and support the vendor guarantees**
 - The vendor is contactable and guarantees timely responses and support
 - System availability, reliability and stability guarantees and measures are acceptable
 - There is provision for 24x7 system monitoring, availability and support
 - The service can be accessed via the devices used by your business
 - The timing of scheduled outages is clear and these will not disrupt your business
- **Security and privacy guarantees**
 - Where is data stored and does that meet the legislative and compliance requirements of your industry/business? What facilities are used?
 - What security infrastructure is in place? What security certifications do they have?
 - The security and privacy policies of the vendor – are these sufficiently rigorous?
 - Will you be notified if a breach occurs? What action will the vendor take in these circumstances? Will you receive adequate compensation if the vendor causes a security breach?
- **What is the vendor's business continuity and disaster recovery plan? Will availability and restoration of your data and the vendor's service occur within a time period that your business continuity can tolerate?**
- **Does the vendor have redundancy and offsite backup arrangements to prevent corruption or loss of data? Can they guarantee the integrity and availability of your data?**
- **The product update cycle. Is there a continuous development process?**



- The reputation of the service provider and their ongoing business viability – how long have they been providing these services? Who are their current customers?

Examples of capability that can be accessed in the Cloud

Examples of services available in the Cloud that are relevant to businesses are listed below:

Financial Management and Accounting packages

- These services include the full financial management and accounting functions required to run your business. Examples include: Xero, Quickbooks Online, MYOB's LiveAccounts, Telstra's T-Suite package, palladiumtech.com.au, nominal.com.au

Customer Relationship Management (CRM) solutions

- These products provide CRM functionality from lead/opportunity identification, to quote management, conversion of quotes to sales orders, analysis of lost opportunities, marketing, customer contact, sales and service history. Examples include: Salesforce.com, SugarCRM, Maximizer CRM, Netsuite CRM, Sage CRM.com. Really Simple Systems CRM, Telstra's T-Suite package, Leadmaster.com.au, Intergen.com.au, adept.com.au

Enterprise Resource Planning (ERP) services

- ERP products manage end-to-end business operations, from financial management and accounting, to production, distribution, supply chain, service and customer relationship management. Examples include: Netsuite ERP, Microsoft Dynamics, SapphireOne, SAP Business By Design, www.happen.biz, gtbusiness.com.au, netfira.com.au

Project Management

- These products support functions such as online resource management and scheduling, project planning, time and expense tracking, project billing and cost reporting. Examples include Tenrox Project Management Software, ProjectManager.com

Document creation applications

- These applications enable users to create and share documents from anywhere. Documents are created, saved and accessed in the Internet (rather than on the hard drive of the computer or local network). Examples include Google Docs, Microsoft Office 365, Zoho Writer, Prezi

Email and Calendar tools

- Many of these products are already used. They include: Hotmail, Google Apps / Gmail, Yahoo! Mail, Microsoft Office 365

Collaboration Tools

- These products enable businesses to share documents and co-author files online. Examples include: Microsoft Sharepoint, Dropbox, Google Apps, Australiancloud.com.au



Virtual Meeting Tools

- These products facilitate virtual meetings by allowing remote participants to electronically communicate and share computing resources. Examples include WebEx – which combines file and desktop sharing with phone and video conferencing, Adobe ConnectNow, GoToMeeting

Infrastructure Services

- Cloud infrastructure services (Infrastructure as a Service - IaaS) is where a cloud supplier provides online infrastructure on which their customers can store data and develop and run applications. It allows companies to move their existing programs and data into the cloud and to retire their own local servers and data centres. Examples include: Amazon Web Services, Rackspace, Telstra.com, Trustedcloud.com.au, nec.com.au, datacom.com.au, cloudcentral.com.au

Cloud Storage Tools

- Cloud storage tools allow data to be stored, backed-up, shared and exchanged in the cloud. Examples include: Box.net, Dropbox, Google Docs, Windows Live Skydrive, Ninefold

Platform Services (PaaS)

- A platform is a software environment used to develop and run applications. For example, Microsoft Word is an application that runs on the Microsoft Windows platform. Cloud platform services (Platform as a Service – PaaS) enable users to access an online platform provided by a cloud computing provider. They can then use this platform to develop and deliver their own online software applications. Examples include Microsoft Azure, Google Apps Engine, Force.com

Cloud Marketplaces

- Online cloud based, marketplaces enable small businesses to eliminate the tedious aspects of selling online. Cloud based ecommerce services include: eBay, Amazon.com, Etsy.com

Where Cloud based options may not make sense today

- You deal with very sensitive customer data
- You require significant customisation of the product to meet your requirements
- You need to meet regulatory, compliance or audit issues that are not achievable through a Cloud service provider

Further information

Visit the business website at business.gov.au.