

# Brief Knowledge to Cloud Computing

# By~ Apixel IT Support (http://apixel.com.sg/)

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### About the book

Brief Knowledge of Cloud Computing will help you to know and understand each and every aspect of Cloud Computing:

- 1. Introduction.
- 2. Types of <u>Cloud Computing</u>.
- 3. Reasons why should we <u>adopt</u>.
- 4. Pros and Cons.
- 5. Tips to avoid.
- 6. Cloud Encryption Tips.
- 7. Great Applications.

### Copyright

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### **Preface**

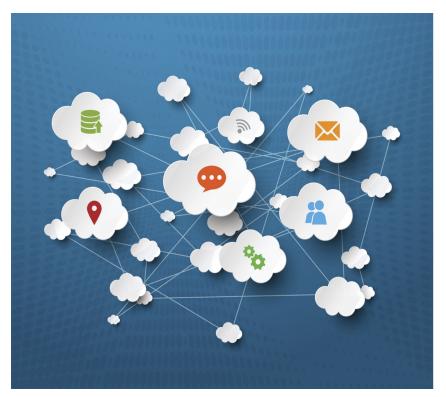
Cloud computing has become a great solution for providing a flexible, on-demand and dynamically scalable computing infrastructure for many applications. Cloud Computing also presents a significant technology trends, and it is already obvious that it is reforming information technology processes and the IT marketplace. This Handbook is a carefully edited book. The scope of the book includes Cloud Computing Basic, Types, Pros and Cons, Tips and a variety of cloud computing applications.

### **About the Author**

Apixel IT Support is founded in 2004 with one goal in mind - to deliver the highest quality IT support services to businesses in Singapore. Like all typical IT companies back then, we were offering support packages with charges based-on service-hours: businesses needing our service will buy blocks of service-hours which they'll consume as and when needed. As this model of IT outsourcing is widely understood and accepted, we adopted the model when we first started operations.

## **Cloud Computing**

Every business, small or big, finds Cloud Computing services essential and favorable! Among certain advantages of this technique are flexible and straightforward access to data and software, nominal upfront costs and genuine overall cost structure.



Even more importantly, businesses using cloud computing services can always expect their cloud vendors to handle and take care of a multitude of costly parts and details of IT department. Some start up businesses, however, are still not able to decide on the right cloud applications. Also, they don't know how to use these applications in the best possible manner and doubt if their data will actually be safe!

Basically, Cloud Computing is Internet Computing wherein you can directly run applications through a website, and are not required to install programs on your computer. And when it comes to data storage, you can store data remotely on the cloud instead of creating too many folders on your computer.

# **Amazing Types of Cloud Computing**

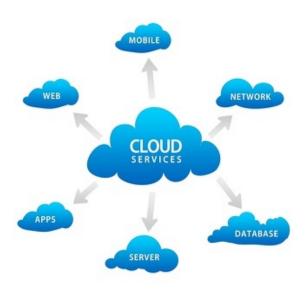
While businesses are hearing a lot of hue and cry about cloud computing benefits, they may not necessarily be able to understand its different types. For, such businesses, here's an eye opener about the six widely used cloud types, take a look:

### 1. Web Based Cloud Services



With web based cloud computing services you can make efficient use of web service functionality without the need for fully developed applications.

### 2. Managed Cloud Services



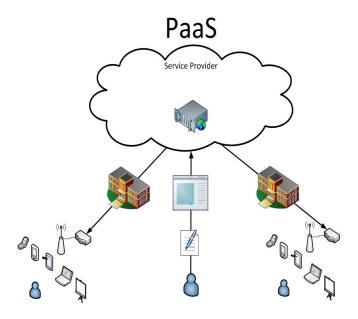
Managed cloud services can be termed as the oldest services based on the concept of cloud. It allows cloud users to utilize an application rather than end users. This service can be used for anti-spam or application monitoring services.

### 3. Software as a Service (SaaS)



With SaaS a specified application can be offered to various tenants over the same browser. This service is ideal for sales and commonly used in HR and ERP services.

#### 4. Platform as a Service



Platform as a Service is an alternate to SaaS. It allows you to run your own applications, but only on the cloud infrastructure of the services provider.

#### 5. Service commerce



The service combines the features of software as a service (SaaS) and managed services. This platform is used for interacting with the end users. That's why this service can be utilized for virtual assistant, travel ordering and expense tracking.

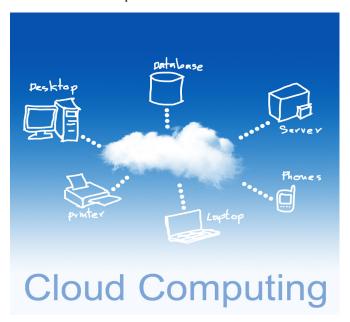
### 6. Utility Cloud Services



Utility Cloud Services are virtual storage services that can be accessed by organizations on demand. Moreover, using this service you can even create a virtual data center for your needs.

## Top Reasons Why Should We Adopt Cloud

A recent survey by software supplier '<u>Sage</u>' indicates that Cloud computing platform has higher client satisfaction rate as compared to traditional IT services. Over 92% of businesses are reportedly satisfied with their Cloud-based service providers.



Higher Customer Satisfaction, Improved Data Accuracy and Outstanding Support are some of the reasons behind the fast adoption of Cloudbased solutions:

#### 1. No Standalone Infrastructure Needed

As the service provider offers the entire computing platform, a client only needs a browser for accessing the Public cloud. This helps lower the TCO (total cost of ownership).

About 33% of companies agree that fewer or no infrastructure requirement is a major benefit of SaaS subscriptions.

### 2. Financial Savings

Cost reductions are the foremost reason for large-scale adoption of Cloud-based services.

SaaS applications offered in a Cloud environment are subscription based; no licensing costs are involved.

### 3. Optimistic Culture

Industry clients already using Cloud services are much hopeful about further augmenting them in 2014 and beyond. About 76% of existing clients are likely to increase the realm of Cloud-based solutions in their organization this year.

### 4. <u>Instant Communication</u>

The Cloud offers location independent resource sharing, thereby ensuring better and faster communication.

### **Pros and Cons of Business Cloud Computing**

If your business is still not supported with cloud computing, you are like to lag behind in business.

In case you are seeking it for your business but hesitant, check the following pros and cons about cloud computing.



### Pros of Cloud Computing:

- With cloud computing solutions, you won't have to worry about data managing centers and take more time for focusing on your business.
- Using cloud computing will help in developing better applications for your business and have better infrastructure for storing and managing data.
- With Cloud computing your business get conveniences like PaaS that allow you to develop new applications more rapidly and specifically.
- If you try adding new applications with your business, you can support it perfectly with a new infrastructure from IaaS (infrastructure as a service).
- With Application programming interfaces (API), you can enhance your business with provisions of scaling, monitoring and automating.
- Preferring cloud computing for financial solutions helps in managing

cash flow and you can keep an appropriate account of your finance.

• By means of cloud computing, you business can make a significant impression on the global market and that too in a quick and focused manner.

### Cons of Cloud Computing

- Because the infrastructure is shared with others, chances of performance getting inconsistent are always higher.
- Security of infrastructure on cloud is major concern among users. However, the extent of security depends on an individual and there are several modes that can be adapted for a secure infrastructure.
- Cloud computing is still in its developing phase and isn't ready to handle all sorts of workloads. This means that cloud completing can only be reliable for specific works.

# 5 Tips to Avoid Cloud Computing Issues

Is your business ready to venture into the cloud computing platform? This amazing virtual world can open your business to greater scalability, increased productivity, cost savings and much more. But, heading without a road map can be detrimental for your business.

Mentioned below are 5 tips to avoid major Cloud computing issues:

#### 1. Know What Needs To Be Controlled

Regardless of the configurations you use, the issues that emerged in the traditional computing environment won't just disappear in the cloud platform. Issues surrounding the configuration, migration, management, bandwidth, performance and provisioning of services still require persistent attention.

#### 2. Leverage Tools To Automate Tasks



Providentially, there are various tools available, which reach across the multiple cloud platforms and work to consolidate tasks which generally require individual management. So, as your deployment increases, such automotive systems should be put into place to handle multiple repetitive tasks.

### 3. Put The Right Professionals In Place

A new environment requires new and specialized skills. This is why it is important for the organizations to get proactive about providing their IT

teams the necessary training and support they need to securely move their business on to the cloud platform. Shortage of skills will only prove to be a show stopper for the many cloud efforts.

### 4. Consistency Is Important

With the right vendor partners and a clear plan to deploy system in cloud-based environment, anyone can explore the cloud computing platform to its full advantage. But while the forward move is in progress, it is very important to be aware of the numerous activities, which can delay or sidetrack you from attaining goals.

### 5. Put A Cloud Management System In Place

If you're backed with a knowledgeable staff, don't resist installing a cloud computing solutions which encourages your team to deliver resources and results in a consistent and methodical way.

## Strong Cloud Encryption Tips

You cannot ignore cloud computing just because there're some valid security concerns. Advantages that the cloud computing stack brings along are too big to ignore and you probably know that. But, how do you go about safeguarding the data you move from an internal server to a cloud server?

Encryption can help.



While cloud companies and vendors will try their best to make each one of their solutions safe and resistant to most known or unknown attacks, it's a fact there're always going to be some gaps.

This is why it is absolutely necessary that you're aware of some important cloud encryption guidelines Here for your perusal, we list out a few:

### 1. Encryption at all Levels

Whether the data is in use, at rest or in transit on the Internet, you need make sure that it is fully encrypted at all times. Always choose a cloud computing solution which ensures strong data encryption at all of these 3 levels. Any vulnerability can work as a way out for hackers.

### 2. Prepare for External as well as Internal Attacks

You need to keep your data safe from not just external but internal attacks too. It's great that you trust all of your employees but what if any one of them is lured by one of your competitors or a hackers' group?

Snow den is a fine example we all shouldn't be forgetting, right?

Not all employees may have full access to your data but it is true that hackers often manage to get in by exploiting tiny security leaks.

Make sure to fix accountability and train your employees on how to really handle the encrypted data.

3. Carefully Review all Of Your Cloud Encryption Options

Cloud encryption is available for public and private clouds both. Make sure to inquire about the cloud encryption method in detail when evaluating a solution. Do not let your decision be guided by the reputation of a company or price alone.

Finally, make it a point to encrypt all of your keys and create an in-house password protection policy.

### 10 Great Cloud Applications

New app packages have shifted the way we used IT services in past. A Cloud computing company delivers through SaaS (Software-as-a-Service) model. Software that once had to be installed now is offered online on a rental model and you need not to install programs on standalone PC for using them.

These apps have features similar to the original software with state-ofthe-art technology. From the large business enterprises to SME owners, there are numerous advantages of using these cloud based apps.

A Cloud application provides information access to company employees 24x7. Online updates ensure automatic sync feature for maintaining the same software version across all set of devices. This benefits employees across all verticals as they're provided with equal growth opportunities.

Given below are the ten applications from which everyone on this planet feels greatly blessed:

### 1. Google Business Apps



This includes cloud services such as GoogleDocs, GoogleDrive, Gmail and other included cloud applications. The files are synchronized with authorized users using their Gmail account.

### 2. Dropbox



Dropbox is a data back-up app providing online storage services with the use of cloud technology. This app is highly beneficial for people in search of storage space for maintaining online backups.

### 3. Skype



Skype is a cloud service launched by Microsoft. Skype allows users to make calls (either voice or video) to other Skype members for free. Service members have also the facility to call land line numbers for a small fee. It helps to save time and cost to a company by allowing everyone to get in touch and link up using videoconferencing technique for sharing information.

#### 4. EverNote



This app takes up all your random notes, drawings on paper pads and organizes them online using digitization technology. It can even accurately recognize the phrases written within images.

### 5. Outright

# outright.

This cloud finance app is highly useful for small business accounting firms. Outright provides all information related to company accounts and allows you to track data 24x7.

#### 6. OfficeMobile



This free app turns the photo (scanned copy) of your business card into a LinkedIn connection by simply uploading it to the mentioned professional network.

#### 7. CardMunch

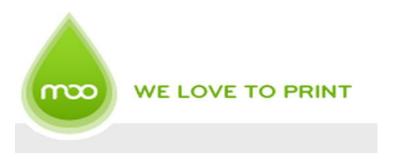


This free app turns the photo (scanned copy) of your business card into a LinkedIn connection by simply uploading it to the mentioned professional network.

### 8. Toggl



This time tracking app helps you to schedule your project tasks. It also makes billing an incredible experience by offering an easy to use GUI interface.



This app offers printing services for postcards and business cards using your own custom designs or images from social networking websites.

### 10. Soundcloud



This app enables users to upload their music files and play it online. People working in music industry can use it to upload a certain recording and then review the visitor's feedback to initiate changes in it.

# Reference Links

Check out the following reference links for all the respective chapters:

- 1. Cloud Computing
- 2. Amazing Types of Cloud Computing
- 3. Top Reasons Why Should We Adopt Cloud
- 4. Pros and Cons of Business Cloud Computing
- 5. 5 Tips to Avoid Cloud Computing Issue
- 6. Strong Cloud Encryption Tips
- 7. 10 Great Cloud Applications