

# What is Cloud Computing?

a DynaSis   
blue paper

These days, small business owners and executives are asking lots of questions about Cloud Computing:

- » What is Cloud Computing?
- » Is it something new, or just a new version of something we've done before?
- » Should I be considering Cloud Computing?
- » Should I have concerns about Cloud Computing?
- » Perhaps most importantly, what does Cloud Computing mean for my small business?

This series of papers addresses these questions to help you decide whether and how your business should move to Cloud Computing.

## The Cloud



Simply put, Cloud Computing is the ability to access data, software applications, storage, communications capabilities, and computer processing power from a “Cloud” of online resources.

The idea of calling remotely located resources a “cloud” goes back to the early days of the Internet and, even before that, to the public telephone network.

Engineers would draw a cumulus cloud to represent a network whose complexity was far more than needed to be diagrammed in detail. Somewhere out there in the cloud were all the resources needed.

## Service Bureaus

In concept this is really nothing new. As far back as the 1960’s, there were solution providers called “Service Bureaus”. Mainframe computers, the only ones that existed at the time, cost millions of dollars. Perhaps Fortune 500 companies could afford them, but smaller businesses couldn’t. Service bureaus allowed small businesses to share the costs of computing by letting those companies submit their data or run their programs on the service bureaus’ computers.

The media may have been punched cards going in and reports from line printers coming out, but the underlying concept was the same as with the Cloud. Cut costs by sharing resources.

## “Utility” Computing

Even earlier in the 20th Century, companies that once ran their own power generators eventually bought electricity from a select group of utility providers because it was cheaper and easier to do so.

At first, companies were reluctant to give up control of part of their infrastructure, but once they did, they were able to focus on getting better at their business. And everyone came out ahead.



Industry experts have long known that, once information technology got to be fast and reliable enough; the world’s computing infrastructure would come to resemble the electricity infrastructure. That’s exactly what’s happening with Cloud Computing – and why it’s also often called Utility Computing.

## Software as a Service

Of course, today’s Cloud Computing solutions are far more sophisticated than those of 40 – 50 years ago. And, odds are, you may already be using Cloud Computing. If you access email through a webmail service such

as Yahoo Mail, Hotmail, or Gmail, you're using Cloud Computing. If you back up your PC to an online storage service such as Carbonite or Mozy, you're using Cloud Computing. And if you use online applications such as Salesforce.com or QuickBooks Online, you're using Cloud Computing. These applications of Cloud Computing are often referred to as "Software as a Service" or SaaS.

But, for small businesses, Cloud Computing can mean much more than these simple applications. The most relevant Cloud Computing services include both Software as

a Service and Infrastructure as a Service, or IaaS. While many people have heard about, and use, SaaS applications, it's actually Infrastructure as a Service which offers the most value for small businesses.

## Infrastructure as a Service

Having your infrastructure in the Cloud means you no longer have to incur the expense, effort and staffing needed to maintain your own in-house servers. Your desktops and laptops still



stay in your office. But your servers, and their software and data, will all reside securely in the Cloud.

You can also relocate your desktop data and software, such as email and office productivity applications, to the Cloud. This way you can ensure that all of your people are using consistent, legally licensed software. And you can make certain that all of your desktops' and laptops' data files are regularly and securely backed up.

It is important to note that it is not necessary to move ALL of your applications and data to the Cloud in order to generate significant advantages. If there are good reasons to do so, you may choose to keep certain mission critical systems or highly sensitive data in house. You can still eliminate the costs associated with standard systems and applications, like email and word processing, which you must use to keep your company running; but which don't confer any particular competitive advantage to your business, by moving those systems and data to the Cloud.

## Cloud Computing Benefits

You may ask whether the benefits of moving to the Cloud justify the effort involved. In our White Paper, **"Why Should My Business Consider Cloud Computing?"** we'll discuss the costs and benefits in detail. But, it's certainly worth taking a moment here to summarize some of the key advantages of Cloud Computing.

**First**, you can eliminate most, or even all, of the overhead and hassles of managing your own server room.

**Second**, you'll have a predictable monthly IT cost which, because you only pay for what you use, is typically **30% – 50% less** than what you pay today.

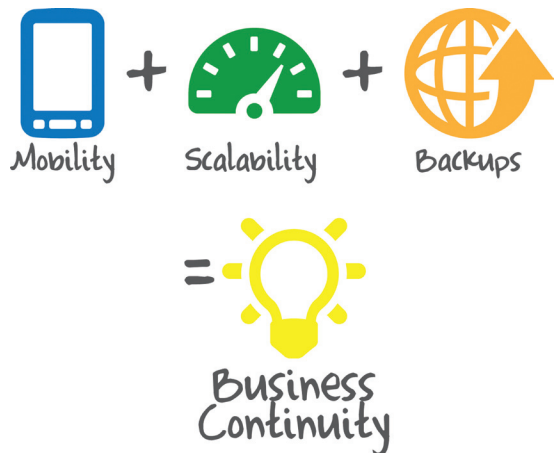
**Third**, because you are, in effect, renting instead of buying technology infrastructure, you convert capital investments to operating expenses.

**Fourth**, your data and systems will be accessible to your entire staff from wherever they have Internet access – at work, at home, or on the road.

**Fifth**, your systems will be automatically and securely backed up and upgraded on a consistent and timely basis.

And **sixth**, as you grow your business, your systems will be smoothly scalable from a handful of people to hundreds or more.

**You'll have a predictable monthly IT cost which, because you only pay for what you use, is typically 30%-50% less than what you pay today.**





## More about Cloud Computing

Of course no experienced business person is going to make a change like adopting Cloud Computing without asking some key questions:

**Is it safe?**

**Is it secure?**

**Is it reliable?**

In our White Paper titled, **“Should I be Concerned about Cloud Computing?”** we’ll address these and related issues in detail. The good news is this. With your systems and

data running in the Cloud, your applications will actually run faster, your systems will be more reliable, and your data will be far more secure than they are today in your current environment.

Finally, you’ll want to know how you can gain the benefits of Cloud Computing for your business. Our White Paper titled, **“The ITility Cloud Solution for Small Businesses”** describes how DynaSis can provide you with exactly the Cloud Computing services your business needs while smoothly managing your transition to the Cloud making it as easy, as inexpensive, and as painless as possible.

**DynaSis Can Help You  
Gain the Benefits of Cloud Computing.  
To Learn More,  
Call DynaSis Today!  
(678) 373-0716**

DynaSis ([www.DynaSis.com](http://www.DynaSis.com)) asked Business Technology Futurist Jack Shaw ([www.e-com.com](http://www.e-com.com)) to write this series of White Papers discussing issues in Information Technology and Cloud Computing and their implications for small businesses. For the past 30 years, he has worked with leading edge technologies – from PC’s to the Internet. For many years now, he has been working with, studying, and analyzing the business impact of the technologies we now know as Cloud Computing.

This paper explains what Cloud Computing is. Others in this series convey some of the Information Technology challenges faced by small businesses, discuss the benefits of Cloud Computing, explore the various kinds of Cloud Computing, address concerns you may have about Cloud Computing, and describe the ITility and Ascend Solutions which DynaSis offers to help your business gain the advantages of Cloud Computing. Much of the content of this series of White Papers is also available in video form at [www.DynaSis.com/videos](http://www.DynaSis.com/videos).

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