

# FREE REPORT:

**“5 Critical Facts Every  
Business Owner Must Know  
Before Moving Their  
Network To The Cloud”**

**Discover What Most IT Consultants Don't  
Know Or Won't Tell You About Moving Your  
Company's Network To The Cloud**

Network Concepts

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# About Network Concepts

*As a small business owner and consultant myself, I want to arm other business owners with a few good pointers to help them avoid getting the short end of the stick.*

*A large proportion of our business comes from referrals from happy, satisfied customers. We want you to recommend us and we know that you will only do this if you are happy with the services we provide. That is why we work so hard to go above and beyond the call of duty.*

*We require ALL of our staff to complete ongoing training to ensure we are up-to-date on the latest technologies and solutions. You won't find a better qualified team of professionals anywhere else.*

## 5 Critical Facts You Must Know Before Moving To The Cloud

In this report I'm going to talk about **5 very important facts you need to know before you consider cloud computing for your company.** These include:

1. The pros AND cons you need to consider before moving to the cloud.
2. Migration GOTCHAS (and how to avoid them).
3. The various types of cloud computing options you have (there are more than just one).
4. Answers to important, frequently asked questions you need to know the answers to.
5. What questions you need to ask your IT pro before letting them "sell" you on moving all or part of your network and applications to the cloud.

I've also included some actual case studies from other businesses that have moved to cloud computing, along with a sample cost-comparison chart so you can see the impact this new technology can have on your IT budget.

At the end of this report there is an invitation for you to request a **Free Cloud Readiness Assessment** to determine if cloud computing is right for your particular business. I encourage you to take advantage of this before making any decisions since we've designed it to take a hard look at the functionality and costs for you as a business and provide you with the specific information you need (not hype) to make a good decision about this new technology.

## What Is Cloud Computing?

Wikipedia defines cloud computing as "the use and access of multiple server-based computational resources via a digital network (WAN, Internet connection using the World Wide Web, etc.)."

### **But what the heck does *that* mean?**

The easiest way to not only understand what cloud computing is but also gain insight into why it's gaining in popularity is to compare it to the evolution of public utilities. For example, let's look at the evolution of electricity.

Back in the industrial age, factories had to produce their own power in order to run machines that produced the hard goods they manufactured. Be it textiles or railroad spikes, using machines gave these companies enormous competitive advantages by producing more goods with fewer workers and in less time. For many years, the production of power was every bit as important to their company's success as the skill of their workers and quality of their products.

**Unfortunately, this put factories into TWO businesses:** the business of producing their goods and the business of producing power. Then the concept of delivering power (electricity) as a utility was introduced by Thomas Edison when he developed a commercial-grade replacement for gas lighting and heating using centrally generated and distributed electricity. From there, as they say, the rest was history.

The concept of electric current being generated in central power plants and delivered to factories as a utility caught on fast. This meant manufacturers no longer had to be in the business of producing their own power. **In fact, in a very short period of time, it became a competitive necessity for factories to take advantage of the lower cost option being offered by public utilities.** Almost overnight, thousands of steam engines and electric generators were rendered obsolete and left to rust next to the factories they used to power.

What made this possible was a series of inventions and scientific breakthroughs – but what drove the demand was pure economics. Utility companies were able to leverage economies of scale that single manufacturing plants simply couldn't match in output or in price. In fact, the price of power dropped so significantly that it quickly became affordable for not only factories but also for every single household in the country.

Today, we are in a similar transformation following a similar course. The only difference is that instead of cheap and plentiful electricity, advancements in technology and Internet connectivity are driving down the costs of computing power. With cloud computing, businesses can pay for "computing power" like a utility without having the exorbitant costs of installing, hosting and supporting it.

In fact, you are probably already experiencing the benefits of cloud computing in some way but hadn't realized it. Below are a number of clouds computing applications, also called SaaS or "software as a service," that you might be using:

- Gmail, Hotmail or other free e-mail accounts
- Facebook
- NetSuite, Salesforce
- Constant Contact, Exact Target, Aweber or other e-mail broadcasting services
- Zoomerang, SurveyMonkey and other survey tools
- LinkedIn
- Twitter
- All things Google (search, AdWords, maps, etc.)

If you think about it, almost every single application you use today can be (or already is) being put "in the cloud" where you can access it and pay for it via your browser for a

monthly fee or utility pricing. You don't purchase and install software but instead access it via an Internet browser.

## Pros And Cons Of Moving To The Cloud

As you read this section, keep in mind there is no "perfect" solution. All options – be it an in-house, on-premise server or a cloud solution – have upsides and downsides that need to be evaluated on a case-by-case scenario. (Warning: Do NOT let a cloud expert tell you there is only "one way" of doing something!)

Keep in mind the best option for you may be a **hybrid solution** where some of your applications and functionality are in the cloud and some are still hosted and maintained from an in-house server. We'll discuss more of this in a later section; however, here are the general pros and cons of cloud computing:

### Pros Of Cloud Computing:

- **Lowered IT costs.** This is probably the single most compelling reason why companies choose to move their network (all or in part) to the cloud. Not only do you save money on software licenses, but on hardware (servers and workstations) as well as on IT support and upgrades.
- **Ability to access your desktop and/or applications from anywhere and any device.** If you travel a lot, have remote workers or prefer to use an iPad while traveling and a laptop at your house, cloud computing will give you the ability to work from any of these devices.
- **Disaster recovery and backup are automated.** The server in your office is extremely vulnerable to a number of threats, including viruses, human error, hardware failure, software corruption and, of course, physical damage due to a fire, flood or other natural disaster. If your server were in the cloud and (God forbid) your office was reduced to a pile of rubble, you could purchase a new laptop and be back up and running within the same day. This would NOT be the case if you had a traditional network and were using tape drives, CDs, USB drives or other physical storage devices to back up your system.

Plus, like a public utility, cloud platforms are far more robust and secure than your average business network because they can utilize economies of scale to invest heavily into security, redundancy and failover systems, making them far less likely to go down.

- **It's faster, cheaper and easier to set up new employees.** If you have a seasonal workforce or a lot of turnover, cloud computing will not only lower your costs of setting up new accounts, but it will make it infinitely faster.
- **You use it without having to "own" it.** More specifically, you don't own the *responsibility* of having to install, update and maintain the infrastructure. Think of it as similar to living in a condo where someone else takes care of the building maintenance, repairing the roof and mowing the lawn, but you still have the only

key to your section of the building and use of all the facilities. This is particularly attractive for companies that are new or expanding, but don't want the heavy outlay of cash for purchasing and supporting an expensive computer network.

- **It's a "greener" technology that will save on power and your electric bill.** For some smaller companies, the power savings will be too small to measure. However, for larger companies with multiple servers that are cooling a hot server room and keep their servers running 24/7/365, the savings are considerable

## Cons Of Cloud Computing:

- **The Internet going down.** While you can mitigate this risk by using a commercial-grade Internet connection and maintaining a second backup connection, there is a chance you'll lose Internet connectivity, making it impossible to work.
- **Certain line-of-business applications won't work in the cloud.**
- **Compliance Issues.** There are a number of laws and regulations, such as Gramm-Leach-Bliley, Sarbanes-Oxley and HIPAA, that require companies to control and protect their data and certify that they have knowledge and control over who can access the data, who sees it and how and where it is stored. In a public cloud environment, this can be a problem. Many cloud providers won't tell you specifically where your data is stored.

Most cloud providers have SAS 70 certifications, which require them to be able to describe exactly what is happening in their environment, how and where the data comes in, what the provider does with it and what controls are in place over the access to and processing of the data; but as the business owner, it's YOUR neck on the line if the data is compromised, so it's important that you ask for some type of validation that they are meeting the various compliance regulations on an ongoing basis.

## Migration Gotchas! What You Need To Know About Transitioning To A Cloud-Based Network

When done right, a migration to Office 365 or another cloud solution should be like any other migration. There's planning that needs to be done, prerequisites that have to be determined and the inevitable "quirks" that need to be ironed out once you make the move.

Every company has its own unique environment, so it's practically impossible to try and plan for every potential pitfall; however, here are some BIG things you want to ask your IT consultant about BEFORE making the leap.

- **Downtime.** Some organizations cannot afford ANY downtime, while others can do without their network for a day or two. Make sure you communicate YOUR specific needs regarding downtime and make sure your IT provider has a solid plan to prevent extended downtime.
- **Painfully Slow Performance.** Ask your IT consultant if there's any way you can run your network in a test environment before making the full migration. Imagine how

frustrated you would be if you migrate your network and discover everything is running so slow you can barely work! Again, every environment is slightly different, so it's best to test before you transition.

- **3<sup>rd</sup>-Party Applications.** If your organization has plug-ins to Exchange for faxing, voice mail or integration into another application, make sure you test to see if it will still work in the new environment.

## **Cloud Versus A Traditional Network: A Comparison Of Costs**

As we said earlier, each client has a unique set of circumstances and needs that will factor into the cost savings and benefits. But in order to give you an idea of what you can save when moving your network to the cloud, we need to put a three year period to show you.

### **Different Types Of Cloud Solutions Explained:**

**Pure Cloud:** This is where all your applications and data are put on the other side of the firewall (in the cloud) and accessed through various devices (laptops, desktops, iPads, phones) via the Internet.

**Hybrid Cloud:** Although “pure” cloud computing has valid applications, for many it's downright scary. And in some cases it is NOT the smartest move, due to compliance issues, security restrictions, speed and performance. A hybrid cloud enables you to put certain pieces of existing IT infrastructure (say, storage and e-mail) in the cloud, and the remainder of the IT infrastructure stays on-premises. This gives you the ability to enjoy the cost savings and benefits of cloud computing where it makes the most sense without risking your entire environment.

**Single Point Solutions:** Another option would be to simply put certain applications, like SharePoint or Microsoft Exchange, in the cloud while keeping everything else on-site. Since e-mail is usually a critical application that everyone needs and wants access to on the road and on various devices (iPad, smartphone, etc.), often this is a great way to get advanced features of Microsoft Exchange without the cost of installing and supporting your own in-house Exchange server.

**Public Cloud Vs. Private Cloud:** A public cloud is a service that anyone can tap into with a network connection and a credit card. They are shared infrastructures that allow you to pay-as-you-go and are managed through a self-service web portal. Private clouds are essentially self-built infrastructures that mimic public cloud services, but are on-premises. Private clouds are often the choice of companies who want the benefits of cloud computing, but don't want their data held in a public environment.

# **FAQs About Security, Where Your Data Is Held And Internet Connectivity**

**Question: What if my Internet connection goes down? How will we be able to work?**

**Answer:** While this is a valid concern, we overcome it in the following way for our clients in the cloud.

**Question: What happens if the Internet slows to the point where it's difficult to work productively?**

**Answer:** We resolve this by keeping a synchronized copy of your data on your on-site server as well as in the cloud. Here's how this works: Microsoft offers a feature with Windows called "DFS," which stands for Distributed File Systems. This technology synchronizes documents between cloud servers and local servers in your office. So instead of getting rid of your old server, we keep it on-site and maintain an up-to-date synched copy of your files, folders and documents on it. If the Internet goes down or slows to a grind, you simply open a generic folder on your PC and the system will automatically know to pull the documents from the fastest location (be it the cloud server or the local one). Once a file is modified, it syncs it in seconds so you don't have to worry about having multiple versions of the same document. Using this process, you get the benefits of cloud with a backup solution to keep you up and running during slow periods or complete Internet outages.

**Question: What about security? Isn't there a big risk of someone accessing my data if it's in the cloud?**

**Answer:** In many cases, cloud computing is a MORE secure way of accessing and storing data. Just because your server is on-site doesn't make it more secure; in fact, most small to medium businesses can't justify the cost of securing their network the way a cloud provider can. And most security breaches occur due to human error – one of your employees downloads a file that contains a virus, they don't use secure passwords or they simply e-mail confidential information out to people who shouldn't see it. Other security breaches occur in on-site networks because the company didn't properly maintain their own in-house network with security updates, software patches and up-to-date antivirus software. That's a FAR more common way networks get compromised versus a cloud provider getting hacked.

**Question: What if YOU go out of business? How do I get my data back?**

**Answer:** We give every client network documentation that clearly outlines where their data is and how they could get it back in the event of an emergency. This includes emergency contact numbers, detailed information on how to access your data and infrastructure without needing our assistance (although our plan is to always be there to

support you), a copy of our insurance policy and information regarding your backups and licensing.

We also give you a copy of OUR disaster recovery plan that shows what we've put in place to make sure we stay up and running.

## Case Studies: What Our Clients Have To Say About Moving To The Cloud



*When Network Concepts recommended we move to cloud computing instead of spending a lot of money to upgrade our network, I was a bit concerned – but when I saw how much money we were going to save, I decided to go for it. I'm very happy we did. I wish I had done this sooner. Plus, Network Concepts tech support has been great. We really haven't had any major issues, but if we do, they're right on it getting it resolved. I'd highly recommend them to anyone looking to save money on IT... and who doesn't want to do that?" –*

*- Elias Wetzel, Abram Custom Carpentry LLC*

### A Final Word...

I hope you have found this guide helpful in shedding some light on cloud computing. As I stated in the opening of this report, my purpose in providing this information was to help you make an informed decision and avoid getting burned by the many incompetent firms offering these services.

**Below you will find information on how to request a FREE Cloud Readiness Assessment.**

### FREE Cloud Readiness Assessment!

As a prospective customer, we would like to offer you a FREE Cloud Readiness Assessment and cost analysis. This Assessment has three parts:

[NetworkConceptsInc.com](http://NetworkConceptsInc.com) [NCIHosting.com](http://NCIHosting.com) [NCIBackup.com](http://NCIBackup.com) [NCISupport.com](http://NCISupport.com) [NCIWD.com](http://NCIWD.com)



1. **Cost Analysis and Inventory:** Our first step is to look at what your current network consists of in hardware, licenses, data, and applications. Next, we compile an IT cost assessment to reveal what you spend in total on IT, including Internet connectivity, support and other fees. Most business owners have never really looked at their entire IT costs this way, and often this report alone is an eye-opener. Why do we do this? Because our goal is to find ways we can significantly lower those costs while simplifying and improving your workflow.
2. **Health Check:** We will perform an Audit of your entire network to look for potential problems, security loopholes, spyware and other hidden problems that you might not know about. Often we find faulty backups, out-of-date anti-virus software, faulty firewalls and missing security patches that, if left unaddressed, could end up costing you MORE in new hardware, support, business downtime and data loss.
3. **Cloud Readiness:** After we've looked at the above areas, we then look at how you and your employees work and share information and see what applications or processes we can safely move to the cloud to improve ease of use and, of course, lower costs.

When complete, we'll give you a Cloud Action Plan that shows you if we can save you money and resolve a number of workarounds and problems you may have been experiencing to date. Even if you decide not to hire us, having a third party conduct this type of assessment will give you some good information on saving money and the security and health of your computer network.

### **How To Request Your FREE Cloud Readiness Assessment:**

*Please Complete And Fax This Form To: 1-215-565-2522 or Email  
Marketing@NetworkConceptsInc.com*

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*Name:* \_\_\_\_\_ *Title:* \_\_\_\_\_

*Company:* \_\_\_\_\_

*Address:* \_\_\_\_\_

*City:* \_\_\_\_\_ *ST:* \_\_\_\_\_ *Zip:* \_\_\_\_\_

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*E-mail:* \_\_\_\_\_