

# **INTRO TO CLOUD COMPUTING**

**“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**

## A Letter From The Author:

# Why We Created This Report And Who Should Read It



From The Desk of: Chris Moroz  
President, Your|I.T. Inc

Dear Colleague,

When you decided to look into transitioning your computer network and operations to the cloud, you were probably met with conflicting advice, confusion and no real answers to your questions and concerns over security, cost and whether or not it's appropriate for your organization.

That's why we wrote this report. **We wanted to give CEOs a simple, straightforward guide that not only answers your questions in plain English, but also provides vital experience-based information that most IT companies don't know (or may not tell you) that could turn your migration into a big, cash-draining nightmare.**

My name is Chris Moroz. My organization works with companies all around Oklahoma who are looking to simplify their operations, provide

The simple fact is, cloud computing is NOT a good fit for every company, and if you don't get all the facts or fully understand the pros and cons, you can end up making some VERY poor and expensive decisions that you'll deeply regret later. The information in this report will arm you with the critical facts you need to avoid expensive, time-consuming mistakes.

Of course, we are always available as a resource for a second opinion or quick question, so please feel free to contact my office direct if we can clarify any points made in this report or answer any questions you have.

Dedicated to serving you,

Chris Moroz

## **About The Author**

Chris Moroz started his career in IT long before he launched his own business. Finding joy in learning about computers throughout his early teen and young adult years eventually led him to pursue work at Fortune 500 companies such as AOL and Dell, where he was awarded Top 5 sales awards at both companies.

Shortly after leaving Dell, he started Golden Years Computer Services, which served typically elderly clients in their Oklahoma City homes. Later, he founded Your|I.T. with a focus on IT management and networking for small businesses.

Since the start of these companies in 2009, Chris has been the recipient of several OKC Biz Magazine's Best of Business awards, is an active Member of the Association of Computer Repair Business Owners, and a 4 year member of the NorthWest Oklahoma City Chamber. Chris regularly sponsors Victory Dance studios and often donates refurbished computers to local schools.

Your|I.T. has gained the recognition and confidence of many area small businesses who entrust him with management of their systems. With Chris' vision, proficiency, and dedication to excellence, Your|I.T. has become the preferred IT resource for hundreds of local businesses throughout the OKC metro.

When Chris is not busy saving the day for a small business owner, you can find him unplugging from all things tech. He enjoys hiking and camping in Oklahoma's breathtaking scenic parks, discovering new foods in locally-owned restaurants with his friends, and investing quality time with his wife, Kari, and two daughters, Gracie and Trinity.

# 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.

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 with enormous and expensive water wheels. **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 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 on premise.

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 cloud computing applications, also called SaaS or “software as a service,” 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.

## **What About Office 365 And Google Apps?**

Office 365 and Google Apps are perfect examples of the cloud computing trend; for an inexpensive monthly fee, you can get full access and use of Office applications that used to cost a few hundred dollars to purchase. And, since these apps are being powered by the cloud provider, you don't need an expensive desktop with lots of power to use them – just a simple Internet connection will do on a laptop, desktop or tablet.

# 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. So if you hate constantly writing cash-flow-draining checks for IT upgrades, you’ll really want to look into cloud computing. Included in this report are examples of how we’ve done this for other clients and what the savings have been.
- **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. While there are workarounds to this situation, it's important to know it's a possibility.
- **Data security.** Many people don't feel comfortable having their data in some off-site location. This is a valid concern, and before you choose any cloud provider, you need to find out more information about where they are storing your data, how it's encrypted, who has access and how you can get it back. You'll find more information on this under "What To Look For When Hiring A Cloud Integrator" later on in this document.
- **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.

## 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, today's connections are more reliable than ever. For those customers who want to ensure near-zero downtime, we work with several local providers to install a secondary fail-over connection.

**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: Do I have to purchase new hardware (servers, workstations) to move to the cloud?**

**Answer:** No! That's one of the selling points of cloud computing. It allows you to use older workstations, laptops and servers because the computing power is in the cloud. Not only does that allow you to keep and use hardware longer, but it allows you to buy cheaper workstations and laptops because you don't need the expensive computing power required in the past.

# What To Look For When Hiring An IT Consultant To Move Your Network To The Cloud

Unfortunately, the IT consulting industry (along with many others) has its own share of incompetent or unethical people who will try to take advantage of trusting business owners who simply do not have the ability to determine whether or not they know what they are doing. Sometimes this is out of greed for your money; more often it's simply because they don't have the skills and competency to do the job right but won't tell you that up front because they want to make the sale.

From misleading information, unqualified technicians and poor management, to terrible customer service, we've seen it all, and we know they exist in abundance because we have had a number of customers come to us to clean up the disasters they have caused.

Automotive repair shops, electricians, plumbers, lawyers, realtors, dentists, doctors, accountants, etc., are heavily regulated to protect the consumer from receiving substandard work or getting ripped off. However, the computer industry is still highly unregulated and there are few laws in existence to protect the consumer – **which is why it's so important for you to really research the company or person you are considering, to make sure they have the experience to set up, migrate and support your network to the cloud.**

Anyone who can hang out a shingle can promote themselves as a “cloud expert.” Even if they are honestly *trying* to do a good job for you, their inexperience can cost you dearly in your network's speed and performance or in lost or corrupt data files. To that end, here are some questions you should ask your IT person before letting them migrate your network to the cloud:

# **Critical Questions To Ask Your IT Company Or Computer Consultant BEFORE Letting Them Move Your Network To The Cloud (Or Touch Your Network!)**

**Question: How quickly do they guarantee to have a technician working on an outage or other problem?**

**Answer:** Anyone you pay to support your network should give you a written SLA (service level agreement) that outlines exactly how IT issues get resolved and in what time frame. I would also request that they reveal what their average resolution time has been with current clients over the last three to six months.

They should also answer their phones live from 8:00 a.m. to 5:00 p.m. and provide you with an emergency after-hours number you may call if a problem arises, including on weekends.

If you cannot access your network because the Internet is down or due to some other problem, you can't be waiting around for hours for someone to call you back OR (more importantly) start working on resolving the issue. Make sure you get this in writing; often cheaper or less experienced consultants won't have this or will try and convince you it's not important or that they can't do this. Don't buy that excuse! They are in the business of providing IT support, so they should have some guarantees or standards around this they share with you.

**Question: What's your plan for transitioning our network to the cloud to minimize problems and downtime?**

**Answer:** We run a simultaneous cloud environment during the transition and don't "turn off" the old network until everyone is 100% confident that everything has been transitioned and is working effortlessly. You don't want someone to switch overnight without setting up a test environment first.

**Question: Do they take the time to explain what they are doing and answer your questions in terms that you can understand (not geek-speak), or do they come across as arrogant and make you feel stupid for asking simple questions?**

**Answer:** Our technicians are trained to have the "heart of a teacher" and will take time to answer your questions and explain everything in simple terms.

**Question: How will your data be secured and backed up?**

**Answer:** If they tell you that your data will be stored in their own co-lo in the back of their office, what happens if THEY get destroyed by a fire, flood or other disaster? What are they doing to secure the office and access? Are they backing it up somewhere else? Make sure they are SAS 70 certified and have a failover plan in place to ensure continuous service in the event that their location goes down. If they are building on another platform, you still want to find out where your data is and how it's being backed up.

**Question: Do they have adequate errors-and-omissions insurance as well as workers' compensation insurance to protect YOU?**

**Answer:** Here's something to consider: if THEY cause a problem with your network that causes you to be down for hours or days or to lose data, who's responsible? Here's another question to consider: if one of their technicians gets hurt at your office, who's paying? In this litigious society we live in, you better make darn sure that whomever you hire is adequately insured with both errors-and-omissions insurance AND workers' compensation – and don't be shy about asking to see their latest insurance policies!

True Story: A few years ago Geek Squad was slapped with multimillion-dollar lawsuits from customers for the bad behavior of their technicians. In some cases, their techs were accessing, copying and distributing personal information they gained access to on customers' PCs and laptops brought in for repairs. In other cases, they lost clients' laptops (and subsequently all the data on them) and tried to cover it up. Bottom line: Make sure the company you are hiring has proper insurance to protect YOU.

**Question: Is it standard procedure for them to provide you with written network documentation detailing what software licenses you own, your critical passwords, user information, hardware inventory, etc., or are they the only person with the "keys to the kingdom"?**

**Answer:** All clients receive this in electronic form at no additional cost. We also perform a quarterly update on this material and make sure certain key people from your organization have this information and know how to use it, giving you complete control over your network.

Side Note: You should NEVER allow an IT person to have that much control over you and your company. If you get the sneaking suspicion that your current IT person is keeping this under their control as a means of job security, get rid of them (and we can help to make sure you don't suffer ANY ill effects). This is downright unethical and dangerous to your organization, so don't tolerate it!

**Question: Do they have other technicians on staff who are familiar with your network in case your regular technician goes on vacation or gets sick?**

**Answer:** Yes, and since we keep detailed network documentation (basically a blueprint of your computer network) and updates on every client's account, any of our technicians can pick up where another left off.

**Question: Are they familiar with (and can they support) your unique line-of-business applications?**

**Answer:** We own the problems with all line-of-business applications for our clients. That doesn't mean we can fix faulty software – but we WILL be the liaison between you and your vendor to resolve problems you are having and make sure these applications work smoothly for you instead of pointing fingers and putting you in the middle.

# Free Assessment Shows You How To Migrate To The Cloud And Avoid Overpaying For Your Next IT Project Or Upgrade

If you're like a number of CEOs we've helped, you've already been burned, disappointed and frustrated by the questionable advice and **complete lack of service** you've gotten from other IT companies. In fact, you might be so fed up and disgusted from being "sold" that you don't trust anyone. *I don't blame you.*

That's why I'd like to offer you a **FREE Cloud Readiness Assessment** to show you there IS a better way to upgrade your computer network AND to demonstrate how a truly competent IT consultant (not just a computer "mechanic") can guide your company to greater profits and efficiencies, help you be more strategic and give you the tools and systems to fuel growth.

**At no cost or obligation**, one of my lead consultants and I will come to your office and conduct a thorough review and inventory of your current computer network, backups and technologies to give you straightforward answers to the following:

- ✓ How using cloud technologies may be able to eliminate the cost, complexity and problems of managing your own in-house server while giving you more freedom, lowered costs, tighter security and instant disaster recovery. I say "may" because it might NOT be the best choice for you. I'll give you honest answers to your questions and detail – in plain English – the pros AND cons of moving your specific operations to the cloud.
- ✓ Are your IT systems truly safe and secured from hackers, viruses and rogue employees? (FACT: 99% of the computer networks we review are NOT, much to the surprise of the CEOs who are paying some other "so-called" expert to manage that aspect of their IT.)
- ✓ Are your backups configured properly to ensure that you could be back up and running again fast in a disaster? From our experience, most companies' backups are an epic waste of money and only deliver a false sense of security.
- ✓ If you are ALREADY using "cloud" technologies, are you adequately protecting your organization from the dozens of ways you and your organization can be harmed, sued or financially devastated due to security leaks, theft, data loss, hacks and violating ever-expanding data privacy laws?

**Even if you decide not to move your network to the cloud or engage with us as a client, you'll find the information we share with you to be extremely valuable and eye-opening when you make future decisions about IT.** After all, it NEVER hurts to get a third-party "checkup" of your IT systems' security, backups and stability, as well as a competitive cost analysis.

## There Is One Small “Catch”

Because our Cloud Readiness Assessments take between five and seven hours to complete (with most of this “behind-the-scenes” diagnostics and research we conduct), I can only extend this offer to the first 5 people who respond. After that, we’ll have to withdraw this offer or ask that you pay our customary consulting fee of \$500 for this Assessment (sorry, no exceptions).

**To respond, please call our office at 405-367-9090 and ask for me, Chris Moroz.** I personally want to take your call to answer any questions about this letter, my company and how we might be able to help you, CEO to CEO. You can also e-mail me direct at [chris@youritok.com](mailto:chris@youritok.com).

Awaiting your response,

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