

# **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**

By Stephen Arndt,  
President, Silver Linings Technology

[www.silverliningstechnology.com](http://www.silverliningstechnology.com)

Phone: 360-450-4759

# A Letter From The Author:

## Why We Created This Report And Who Should Read It



From The Desk of: Stephen Arndt  
President, Silver Linings Technology

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 Stephen Arndt and our company was founded in 2012 as SMArndt, now Silver Linings Technology, is a technology services and IT support company. Drawing from more than 25 years of experience and expertise, we provide unparalleled managed IT and consulting services, including infrastructure, security, storage, virtualization, business continuity, portals and collaboration and sustainable IT solutions.

In January 2017, the company rebranded to include its growing services and team. It continues its dedication to excellence and quality of service. Silver Lining Technology understands the need for first-rate technology blended with controlled budgeting. We help companies generate revenue, control costs, and mitigate risks through a series of carefully calculated strategies that ensure smooth transitions and an ideal future state for companies implementing new IT initiatives.

Our goal is to form a partnership with our clients, to maximize the efficiency and productivity of their business, and to enable them to achieve a competitive edge by leveraging current technology.

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,

Stephen Arndt

## **About The Author**

Stephen Matthew Arndt (CEO and CIO), a national healthcare information technology consultant and industry leader, is an innovator, change agent, and problem solver who focuses on results. Stephen has spent more than 25 years in IT, specializing in healthcare for more than 15 years.

Prior to this, Stephen served as managing director, Consulting CIO, and senior consultant for IT Powered, a VCPI Company. He also served as the vice president and CIO of Assisted Living Concepts, Inc. Stephen also brought his passion and knowledge of healthcare and technology to the world of higher education. He taught technology and businesses classes, authored a class on databases, and designed IT applications for development and implementation as an adjunct professor at George Fox University.

Stephen is a member of the following associations: SIM Portland, CIO Forum, First Robotics, and Assisted Living Federation of America. He has spoken at AFLA, HC100, CALA, and VCPI Client Connections.

Stephen holds a Bachelor of Arts in Management and Organizational Leadership as well as a Masters in Business Administration with a focus on Information Technology from George Fox University in Newberg, OR.

# 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 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. In fact, we save our clients an average of 30% when we move some or part of their network functionality to the cloud. 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. It’s a different world of work.
  - Work done remotely from multiple sites
  - Mobile platforms
  - Vendor agnostic workstations

The cloud offers solutions for these and other technology struggles businesses face. Whether the need is complex like a complete data center in the cloud, or a simple as cloud applications that support or monitor critical functions, there is a certainly a cloud solution that fits your needs.

- **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.
- **Operational excellence, customer intimacy, product leadership, and accelerated innovation** outlined in a recent post in Forbes: Cloud and mobility, e.g., can be used to optimize field support and logistics; big data aggregation and deep analytics leveraging the cloud can support a customer intimacy strategy, as Amazon or Netflix NFLX +1.87% seemingly know more about your preferences than you yourself do; cloud services can differentiate products, such as when Nike+ differentiates an athletic brand via cloud-enabled data collection and social networking; and cloud-based contests, such as the Netflix prize, can support an open innovation strategy, leveraging insights well beyond the limits of internal R&D.

### **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.
- **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.
- **Certain line-of-business applications won't work in the cloud.** For example:
  - Oracle Databases - It's possible to virtualize Oracle databases, but performance concerns have led many administrators to be apprehensive about it.
  - Apps that require Dongles or USB - Some legacy application require USB dongles to be plugged in to servers in order to verify software licensing and activate the software. This can be impossible to replicate in a virtual environment, even with USB support.
  - Old Apps and Operating Systems without Official Support - Virtualization platforms can't support every legacy platform, unfortunately. Some common legacy systems are HP-UX and IBM AIX and AS/400, circa late 1990s and

early 2000s. VMware doesn't support these platforms, even though they go way back for Linux and Windows OS. Until the applications running on these platforms are rebuilt, clients who want to virtualize must remain on physical infrastructure.

- **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, Google 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 one particular analogy is often repeated, the "Rental Car Analogy". Microsoft's Alan Merrihew, Senior Director of Government Technology Strategy explains;

If you have guests coming into town to visit, do you buy a car for them to use while they are in town for two weeks? And then does that car sit idle until the next time they come to visit? No, of course not! Logically, you would rent a car for them to use while visiting. Cloud services are effectively like a renting a car service, only for ICT. Let's look at the five characteristics of a cloud service again using the rental car analogy:

1. **On-demand self-service** (it is easy to rent a car, you can book a reservation by phone or online)
2. **Broad network access** (there is a broad network of rental car agencies around the world to give you access to a car rental.)
3. **Resource pooling** (The rental car companies manage a pool of cars in any given city to meet demand. You don't have to worry about it. If one agency is out of cars they will often refer you to another to help you find a car.)
4. **Rapid elasticity** (Rental car companies move cars into a particular location when there is a large event and they know demand will be high. They scale up and down to meet the demand.)
5. **Measured service** (You pay only for the time you used the car. Once you turn it back in you are done. No maintenance, insurance, fuel, tires, etc.)

But in order to give you an idea of what you can save when moving your network to the cloud, we've put together a sample business scenario we commonly find, and the savings obtained with cloud computing.

Please note we've shown this over a three-year period since that is the normal span of time when all workstations and servers need to be replaced and software upgraded; and to account for the fact that you don't have to purchase new hardware as often (which is a huge cost savings when moving to the cloud), we need to show this over a three-year period to show the true and full cost savings.

In the specific TCO example we examined, a managed hosting solution provider (in this case Rackspace) was able to provide a 37% savings over a 3-year period for a retail / ecommerce organization when compared to a self-managed, on-premises solution. But the benefits of the cloud depend on many factors, and mileage will vary for your organization.

## 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.

# 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**, we will consult with you 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 seven people who respond. After that, we’ll have to withdraw this offer or ask that you pay our customary consulting fee of \$850 for this Assessment (sorry, no exceptions).

**To respond, please call our office at 360-450-4759 and ask for me, Stephen Arndt.** 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 [sardnt@silverliningstechnology.com](mailto:sardnt@silverliningstechnology.com).

Awaiting your response,

Stephen Arndt

[www.silverliningstechnology.com](http://www.silverliningstechnology.com)

360-450-4759

# The Top 7 Reasons Why You'll Want To Outsource Your IT Support To Us:

1. **We Respond Within 5 Minutes Or Less.** The average amount of time it takes for one of our clients to get on the phone with a technician who can start working on resolving your problem is 3.5 minutes. We know you're busy and have made a sincere commitment to making sure your computer problems get fixed FAST. And since most repairs can be done remotely using our secure management tools, you don't have to wait around for a technician to show up.
2. **No Geek-Speak.** You deserve to get answers to your questions in PLAIN ENGLISH, not in confusing technical terms. Our technicians will also not talk down to you or make you feel stupid because you don't understand how all this "technology" works. That's our job!
3. **100% No-Small-Print Satisfaction Guarantee.** Quite simply, if you are not happy with our work, we'll do whatever it takes to make it right to YOUR standards without charging you for it. And if we can't make it right, the service is free.
4. **All Projects Are Completed On Time And On Budget.** When you hire us to complete a project for you, we won't nickel-and-dime you with unforeseen or unexpected charges or delays. We guarantee to deliver precisely what we promised to deliver, on time and on budget, with no excuses.
5. **Lower Costs, Waste And Complexity With Cloud Solutions.** By utilizing cloud computing and other advanced technologies, we can 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.
6. **We Won't Hold You Hostage.** Many IT companies do NOT provide their clients with simple and easy-to-understand documentation that outlines key network resources, passwords, licenses, etc. By keeping that to themselves, IT companies hold their clients "hostage" to scare them away from hiring someone else. This is both unethical and unprofessional. As a client of ours, we'll provide you with full, written documentation of your network and all the resources, software licenses, passwords, hardware, etc., in simple terms so YOU can understand it. We keep our clients by delivering exceptional service – not by keeping them in the dark.
7. **Peace Of Mind.** Because we monitor all of our clients' networks 24/7/365, you never have to worry that a virus has spread, a hacker has broken in or a backup has failed to perform. We watch over your entire network, taking the management and hassle of maintaining it off your hands. This frees you to focus on your customers and running your business, not on your IT systems, security and backups.