

Cloud Communications Services: Five Questions You Need to Address for Success

February 2013 By Jon Arnold



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Introduction

Whether cloud communications is a familiar term or not, it has many connotations, several of which can have a positive impact on your business. Many businesses have been successfully using cloud-based applications for years, but following this path for communications is much more recent. The cloud involves complex technologies, but has been gaining a lot of traction lately for various forms of communications.

Before assessing the merits of cloud communications, you should consider what this entails. For some businesses this just means telephony – VoIP – and this is a perfectly viable solution. Others, however, view communications more broadly to include applications such as video, text, chat, messaging, email, conferencing, etc. The common element is that these are all real-time or near real-time applications, and the value of technology comes from its ability to support these modes as they are needed.

This guide has been produced with that broader scope in mind. The cloud can be used in many ways, but given the nature of real-time communications, the demands are greater than for needs that are less time-sensitive. Communications is the lifeblood of any business, and to make the right decisions, you need to ask the right questions. Our research indicates five questions that are especially important, and this guide will give you a solid foundation how best to answer them for your business needs.



Question #1 - Why use the cloud for communications?

When considering the cloud for communications, this should be your first question. While it's important to understand more about the various types of cloud options and how they work, the starting point needs to be the "why" – what is the rationale for essentially outsourcing something that is so core to your everyday operations? To help you address that question, our research can be distilled to three basic reasons:

- 1. More IT-friendly
- 2. More management-friendly
- 3. More capital-friendly

Each is outlined below, along with the key benefits to your business, as well as risks and challenges.

Reason #1 - more IT-friendly

Since decisions around communications are usually driven by IT, the cloud needs to be beneficial for their world. The following are prime examples to support moving communications to the cloud:

- Limited resources and/or expertise to support IP-based applications with no expectation this situation will improve
- IT is going to be scaled back over time, and the cloud will be the best way, long-term, to ensure the company stays current with communications
- Company is becoming increasingly decentralized and/or virtualized, and current IT infrastructure will be hard-pressed to support this shift
- Conversely, there are risks and challenges in terms of being IT-friendly:
- This is a tacit admission that IT is not strategic or prepared enough to keep communications in-house
- Once IT gives up communications, it will be difficult to get it back unless the cloud is truly a failure
- Requires strong trust that giving up control to an outside party will not compromise either IT's overall mission or performance of the business
- May give management cause to consider outsourcing IT entirely and eliminating the staffing and budgets that have been built up over many years



Reason #2 - more management-friendly

Aside from doing what's best for IT, there must be some good upside for management. Here are key reasons why:

- Business becomes more flexible and agile this way, both of which help competitiveness. Management values these attributes, and compared to what's possible with legacy technologies, cloud communications is a big step forward.
- Management wants to ensure employees have the most current, comprehensive set of tools to do their work. Communications technologies are complex and constantly evolving, and the cloud can be a better way to mitigate these issues.
- Comfort level may already exist from using other cloud-based applications
 or platforms for business-level operations. This typically speaks to the world
 of ERP or CRM software, with Salesforce.com being a prime example. If
 management trusts the cloud for this type of data, communications is not really
 such a big leap.
- In cases where businesses have had issues with operational continuity or disaster recovery, the cloud offers important advantages that premise-based environments cannot match.

On the other hand, management needs to be mindful of the following:

- Cloud providers have a short history, and given the importance of communications, management must consider the potential risk of financial or technological failure.
- With highly sensitive and valuable information being hosted offsite, there are
 legitimate issues about accountability, security and privacy of this data. This is
 especially true in industries with strict data compliance requirements as well as
 with public companies that must be transparent to shareholders.



Reason #3 - more capital-friendly

This is a very specific factor, but it's highly central to any decision around the cloud. The aspects that support this rationale include the following:

- Utility model of the cloud is Opex-based and easier to budget for. Legacy
 communications systems were Capex-based, requiring long cycles to secure
 funding, and long cycles to write down. This makes cloud especially attractive
 to smaller businesses with limited capital means.
- Pay-as-you-go also means better cost control. The business only pays for what
 it consumes, so IT no longer needs to over-spend or over-provision to support
 everyone with these technologies.
- Cloud services are mostly software and Web-based, and any underlying purchases to support this will have short depreciation cycles – usually 2-3 years. This is much shorter than the 7-10 year cycles found with legacy telephone systems.

Balancing this out, here are reasons why cloud communications may not be all that capital-friendly:

- Being a service rather than a hard asset, there could be vulnerability here with budget cuts when cashflow dictates belt-tightening. Across-the-board cuts could compromise the suite of communications being drawn from the cloud – something that would not happen if managed in-house.
- Cloud communications is a new space, and the TCO advantages touted by
 vendors may not hold up down the line. We don't have enough of a track record
 to conclude this is a virtue when compared to making the up-front acquisition
 investment with nominal recurring costs over time. At some point, renting
 becomes more expensive than owning, but we don't know yet when that time
 comes with cloud communications.

Question #2 – For whom is the cloud best?



The above summary may not be comprehensive, but does cover a wide range of scenarios that would explain why your business would want to adopt cloud communications. Having gotten past that, the next consideration is which type of business will the cloud be most suitable for? In theory, any business could push communications into the cloud, but here two basic criteria to help you determine just how ready you really are.

Criterion #1 - highly decentralized/distributed operation

A key advantage of the cloud is taking geography out of the equation. For communications, this is quite a break from the legacy model, where telephone systems were bound by physical connectivity to a voice network, with every branch location requiring its own onsite infrastructure. The cloud makes it easy to ramp up new locations, as they just need to be connected via broadband to the LAN. When SIP trunking is added, these sites can get end-to-end IP and a rich suite of HD applications at a fraction of the cost if based on legacy systems.

This actually works equally well for any size of branch operation. The benefit is greatest when you have full-size remote offices which may need to support dozens or even hundreds of employees onsite. In this case, the cloud delivers scale, making it easy to quickly provision communications services to a large number of end users. If you have been through this with legacy technology, the benefits will be very evident, both in terms of cost savings and ease of integration with the LAN.

For SMBs, a distributed operation looks very different, but the results are similar. Branch offices will be smaller – perhaps under 10 people – but you may also be relying heavily on home-based employees. We have examined the business case for remote workers in other VoIP News guides, and the economics here are attractive as well. You may be supporting dozens of remote workers, and with the cloud, it really doesn't matter where they're located. This opens up new opportunities for businesses to both support employees seeking a better work/home balance as well as take on remote employees with highly specialized skills, but located in distant geographies.

Other good examples of highly distributed businesses would be retail, restaurant chains and hospitality. In many such cases, there will be a large number of standalone sites, with each location only requiring a few phones. These sites are too small to warrant their own infrastructures, and the cloud is a highly efficient and economical way to extend the benefits of UC to all of them.



Criterion #2 - strategic focus on leveraging data and technology

This is a horizontal issue, and has little to do with the type of business you're in or your scale of operations. Just like with UC, the cloud is more of a strategic decision for the overall business rather than one based on making IT's life easier. Considering that most businesses are still using legacy telephony systems, it's fair to say that this strategic focus is not yet the norm.

Clearly, businesses that have fully migrated to IP see things differently, and their decision is not based solely on the financial impact. When they look at the cloud, other considerations come to mind, such as:

- Ensuring that all employees have access to the latest communications applications wherever they're located
- A more cost effective way to manage technology, especially when things are changing so quickly
- Having a common platform across which real time data can be captured and analyzed to help improve business processes
- Having a flexible technology infrastructure that allows the business to quickly respond to changing conditions and improve time to market

When businesses think along these lines, the cloud becomes a more logical direction for communications. While many migrations from legacy to VoIP will remain premise-based, a growing number will look beyond telephony to the broader set of benefits this guide has been discussing. Also note that size of the business has not yet been addressed. This criterion applies equally well to SMBs as enterprises, and even for SOHOs. Given the sheer number of smaller businesses, many cloud providers have focused on scaled down communications offerings to address their needs. As such, the cloud works well for any size of business that is ready to take a more strategic view of technology.

Question #3 – With whom should you partner for cloud communications?



Once you have decided that conditions are right for this, an even bigger decision looms. With the cloud largely being an outsourcing exercise, choosing the right partner is of paramount importance. Help in making that choice merits a guide of its own, and what follows is a simplified summary of the landscape. In terms of cloud-based solutions for communications, we see four basic types:

- Incumbent communications vendor
- · Incumbent telecom provider
- Competitive telecom provider
- · Pure play cloud solutions provider

Incumbent communications vendor

This would typically be your telephony vendor, all of whom have by now developed some form of a cloud-based solution. Some are telecom-centric, and are essentially VoIP delivered from the cloud. Others are more communications-centric, built around some variation of UC and a more powerful user experience.

Another type of vendor would be software-based, with Microsoft being the dominant example. These platforms incorporate many of the applications found with the above-stated telephony vendors, although voice is generally not a native capability. That, however, is changing, and today these offerings can serve as bona fide communications hubs. Continuing with the Microsoft example, this takes the form of Lync, which provides a full UC suite, either in partnership with a telecom vendor for voice, or just relying on native voice applications.

Regardless, both telephony and software vendors have cloud-based offerings, and they see this as an essential strategy to retain customers as they migrate to IP. The attraction is their familiarity, making this the path of least resistance. Remember, though, that they are generally new to the cloud themselves, so there's a learning curve for them as well. Depending on your history with them, staying with your incumbent vendor can be a safe bet – or a risky move.



Incumbent telecom provider

This is another scenario where familiarity may trump any reservations about performance or ease of deployment. Like the vendors, operators need to work harder than ever before to keep their customers, and cloud gives them a new lease on life. There is still money to be made in legacy services, but the growth is in IP services, and telcos must find ways to add value. Connectivity is becoming a commodity, and hosted UC gives them a path forward.

In most cases, their cloud communications offerings are from the same vendors cited above, just repackaged and bundled here for a complete connectivity + applications package. While familiarity may carry the day here for many, you may have concerns about paying top dollar, not being an important customer for them, or being locked in to long term contracts. Generally, the larger the business, the more this option makes sense.

Competitive telecom provider

This largely encompasses CLECs – competitive local exchange carriers – of which there are hundreds, mainly serving SMBs and smaller scale enterprises. The cloud concept has existed under other names for some time, with hosted and managed being the most widely-used terms. Most CLECs operate on this basis, as they are not always facilities-based, and must rely on partners to provide connectivity. Their real value-add comes from being more personable than incumbent telcos and having more innovative offerings that customers have been looking for. Cloud communications certainly speaks to that.

As such, businesses have many CLECs to choose from, and need to do their homework to pick the right one. Some partner with vendors for the communications platform, while others build their own technology. In either case, the business must be certain the platform is compatible with their environment. Most CLECs are small and regional, both of which will be of concern for larger businesses. Once you've narrowed down candidates with the right footprint, you'll need to ascertain their financial viability and roadmap for cloud applications. This market will continue to evolve and you'll want to be sure they can attract developers to build tomorrow's applications as well as support the devices your employees will be using down the road.



Pure play cloud solutions provider

This is really a sub-set of CLECs, but on a more specialized basis. Whereas CLECs are rooted in the telecom world, pure plays come from the Internet world and carry no legacy baggage. They understand the cloud better than anyone else addressed in this guide, but their focus is usually fairly narrow. One example is a hosted provider only offering IP PBX or VoIP. They certainly meet the criterion of being cloud-based, but only for voice. This would be a good choice if your objective is to reduce telecom costs, but not for much else.

Another example would be a cloud-based operator that only does video calling and conferencing. Video is gaining a lot of traction now, and with a few recent technological advances, cloud-based offerings are both viable and affordable, even for SMBs. Again, if this is all you have in mind for the cloud, the results will be good.

Question #4 – When should you consider cloud communications?



Moving on to the question of "when", there is no simple answer for the ideal timing. The driving forces will usually be internal, but could also be external, and each will be discussed below. This is never a simple decision, but you should also keep in mind that cloud is not an all-or-nothing migration. Flexibility is a hallmark of the cloud, and you can go at whatever pace suits your needs. For communications in particular, you could start with one application – such as video conferencing or VoIP – and add others as warranted.

Internal drivers for cloud communications

- Existing communications capabilities are saturated and no longer able to meet
 everyday needs. These problems are forcing a rethink, both in terms of value
 for level of expenditure, and whether the services can still meet the needs of
 your employees today. This becomes particularly pressing if the business is in a
 growth mode.
- Both IT and management are assessing whether the current network infrastructure and associated technologies are aligned with the needs of the business. Recent developments such as BYOD, mobile broadband, remote working and virtualization are raising fundamental questions in this regard.
- In a weak economy, management may instill across-the-board cuts, and this
 could cause IT to scale back to the point where the cloud becomes a better
 option for communications.
- Today's communications technologies are becoming too complex for IT to
 continue managing. This environment is markedly different from TDM, and the
 business cannot afford the time and cost needed for IT to catch up migrating
 to the cloud is simply a better plan.

External drivers for cloud communications

Your incumbent telecom vendor is going through a change that directly impacts your operation. For businesses with aging telephony systems, vendors are increasingly phasing out support for legacy products, leaving you with two choices. Either switch over to IP or source parts and service on the black market to keep your legacy system going. On a broader scale, the vendor may be challenged to stay in business, and needs to be acquired or exit the market altogether. Any of these scenarios represents a classic trigger event that should give you cause to consider the cloud.



- As cloud technologies mature, the range of offerings continues to grow.
 Businesses have never had so many options, and today there are viable cloud communications solutions for any situation. What makes this a driver is the fact that you may think cloud is only good for large enterprises, or solutions can only come from telecom vendors. By moving from a legacy mindset, you are more likely to discover great options from unexpected sources, both in terms of capabilities and cost.
- Your competitors are using cloud this way and the changes are starting to
 impact your business. This puts you in catch-up mode, but it's a clear validation
 that cloud is an effective path for managing communications. Fortunately, this
 is still new territory, so you can afford to be a follower plus your competitors
 have absorbed the growing pains, and hopefully you can bypass this stage.

Question #5 – How should your business deploy cloud communications?



The question of "how" to deploy cloud also warrants a dedicated guide, as this needs to be considered on several levels. Technology-wise, the cloud is complex, and this guide will only touch on the most fundamental choice from which many other decisions follow – the deployment model.

There are two basic paths to take here – public or private cloud. By its nature, the cloud has a host of trade-offs compared to the conventional model of keeping all communications in-house and under IT's control. The cloud should reduce costs for IT, and in return they should get a more flexible services platform and hopefully with little or no compromise from the status quo. Of course, the latter is where the issues come up, and at a high level, here are some things you need to be looking for:

- Where, exactly will your data reside domestically or abroad? Will it be centralized in one data center, or spread out across many?
- How secure will your data be? Does the provider meet any compliance requirements for your industry? What recourse do you have if there is a security breach?
- •Will you have the five 9's reliability that legacy has been providing your business for all these years? How can the provider ensure this? How much redundancy does their infrastructure have for the uptime you need?
- Is the cloud provider running their own infrastructure, or are they themselves outsourcing this to other, larger cloud platforms?
- How scalable is their platform? Your initial deployment may be too small to determine if they can support your entire organization.
- Is communications their core focus, or are they a generic cloud services provider? Who are their key partners for communications applications?
- How viable are they as a business and do they have reference accounts for situations like yours?

As a rule of thumb, these questions will loom larger with a public cloud provider, as their services will run over the public Internet. Your costs will be less, but the risks around the above points will be higher than with a private cloud provider. Another factor to consider is flexibility. You may have some specific communications applications that their platform does not support – or they decide to stop supporting after you've gone with them.



This is part of the bargain you strike when giving up hands-on control over your network, so you need to take a long-term view here. You can certainly go back to a premise-based model if the cloud doesn't work out, but this will be both costly and disruptive – not to mention dropping a few notches on your credibility meter.

Conversely, as the term implies, private cloud is a more controlled environment, and is finding favor, especially among large enterprises. The extra cost compared to public cloud can be justified by the higher comfort level in addressing the above issues, although there is no easy way to quantify or validate these differences in performance. Cloud is really too recent in the communications space to have these tiers established, and beyond doing your due diligence, this is going to be a judgment call.

One way to balance things out is to pursue what is called the "hybrid cloud" approach, where you use a mix of public and private providers. This again speaks to the flexibility of cloud-based infrastructures, where you could pay more to host your most mission-critical communications applications in a private cloud and host the rest with a public cloud provider.

You should also keep in mind that these distinctions are not carved in stone. Cloud will continue to evolve, and you should expect to see higher-end public offerings to attract a more complete range of hosting for businesses, as well as lower priced private clouds trying to get the same result. Either scenario will likely render the hybrid option moot, and as cloud players refine their value propositions for communications solutions, businesses will find it increasingly easier to justify one path or the other.



Conclusion

The need for communications will never change, and it doesn't matter to your employees whether this is managed internally or from the cloud. However, for IT, this matters a great deal, and the same will likely be true for management once the cloud becomes better understood. There is no proven path for embracing the cloud, so when considering if this is right for your communications needs, you need to understand the landscape. The underlying technology is one aspect, but more importantly, you need to consider how the cloud aligns with what's most important for the business.

This guide has addressed five key questions to help you determine that fit, along with a frame of reference for identifying the right conditions. Any decision you make in favor of the cloud will come at the expense of something else, so there will always be implications for what you have been doing up until this point. In essence, the cloud is about change, and the more you view change as an ongoing state that is necessary for success, the more business value the cloud will have.

In that regard, the cloud is as much a strategic decision as one about technology, and that thinking has shaped the questions posed in this guide. You certainly will – and should – have other questions in mind when considering the cloud for communications, but they'll be much easier to answer once you have addressed the five issues discussed herein.

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