

Selecting a Voice Solution

Hosted VoIP vs. PBX VoIP

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Introduction

VoIP has been around for awhile, but lately many companies are seriously thinking about going with VoIP throughout their company. Usually they mean hosted VoIP where their phone system is hosted out on the internet. However, new PBXs with all the latest features tend to be VoIP, and your traditional voice carrier is probably using VoIP to connect your calls - so you may be going VoIP no matter what you do.

The question is what kind of VoIP do you want? What are the tradeoffs today?

We are assuming you don't want to do it yourself. The decision to take voice completely in house is a big change for an organization. Until then you want service and support. Today you're probably looking at a PBX from Nortel, Avaya, etc. or hosted VoIP.

We have consulted with quite a few clients walking them through the decision making process. We figured out their requirements, researched potential vendors and their solutions, showed them their options for features / prices / services, etc. Below are our primary findings. First you can review where most companies are today with their traditional solution and then see what are the new options and trade offs.

The Traditional Solution

The traditional solution set is phone service from a LEC like Verizon or AT&T, a PBX (office phone system) from a manufacturer like Avaya or Nortel, and the whole thing is installed and supported by the local PBX Vendor. Often the local PBX Vendor builds out the data network and helps with installing the data lines and network gear. This solution is extremely reliable for customers, and is based upon very strong technology and systematic processes.

Legacy systems are very reliable, but the customer experience of dealing with the PBX vendor and phone company is often bad to terrible. For most companies change is a nightmare, and managing everything is a hassle. There is no way to easily go in to the system and see what is going on. Often a change or simple request would involve a truck roll where the PBX vendor would send out an employee, often at a very high hourly rate, to fix a basic problem or move a phone or number to another location. When things did go wrong, sometimes the phone company and the PBX vendor would point fingers and neither would solve the problem.

The PBX solution also tended to be expensive. Telecom today is a top 5 expense for most organizations. The monthly carrier charges even today are \$1,000 per employee per year. PBXs are significant investments, and an upgrade can often cost thousands of dollars per employee. (With proper cost management however using voice lines is actually very inexpensive. See below.)

Why VoIP?

There are many reasons why companies are interested in VoIP. Primarily VoIP is lower cost, with better features, and it is easier to manage. Some of the latest features are listed below in the section [Latest Features of VoIP](#). As one would expect most of them revolve around making communication faster and easier, and integrating people and their phones and PCs.

When the internet started the Data people looked around and thought – “Let’s put voice calls over the internet and networks. It will be cheaper, and the voice guys don’t have a clue about service or new features.”

The Voice people said “Data guys don’t have a clue about how to build highly reliable systems. Voice is only as good as the networks it goes over.”

They were both right.

Data and IT people, if not all people, find the phone companies and often PBX vendors have inadequate customer service. Entrepreneurs saw an opportunity and stepped in, and now there are lots of companies you can buy Hosted VoIP from. However a lot of customer found out the hard way that inadequate internal networks and internet connectivity equals bad voice service.

The Primary Tradeoffs Today

There are now a wide variety of Hosted VoIP providers. The best offer the latest features, including PC / Phone integration, low costs, and fantastic customer service. However the best traditional PBX manufacturers are arguably offering better features including integration, and the total cost of ownership can be lower than Hosted VoIP too.

Below are our overall findings. We'll go in to more detail later about Hosted VoIP and PBX. Understanding the total cost of ownership also makes a huge difference.

1. Upgrading to your vendors' latest PBX will work. It is a safe choice.
2. Your Hosted VoIP provider is only as good as the internet connections and the internal network you have. The provider must manage the quality of service on the entire network. Few companies are qualified to do this. Make sure yours can essentially own the entire network, including yours.
3. The best Hosted VoIP companies will 'own' the network. They are also easier to work with than the phone company / PBX vendor combo. Hosted VOIP can be cheaper if you don't have a way to manage your monthly telecom costs from your carriers. In fact it probably won't cost you much to upgrade to a new system. Getting help in purchasing hosted VoIP can also reduce costs further.
4. PBXs now offer a lot of the features and easier management people look for in VoIP, and new PBXs connect to desk phones with VoIP. If you're not managing monthly carrier costs, doing so can pay for a new PBX. If you're already managing costs, hosted VoIP may be more expensive than a PBX.
5. PBX vendors and phone companies can sometimes be so difficult to work with it is worth forgoing to the high reliability, low cost, and latest features of a new PBX and instead use the great customer service of a top of the line Hosted VoIP company. It isn't the cheapest option but you'll also get free upgrades and you won't have to worry about voice again.

In sum - common problems tend to be bad network and voice quality on the VoIP side and bad customer service and overall pricing on the PBX side. With expertise on who to buy from and how these problems can be minimized if not eliminated. If you're an expert at the end of the day you'll get the best pricing from using a PBX and voice lines, but the best hosted VoIP companies are easier to work with and offer free upgrades and better pricing than most companies have today.

Hosted VoIP

A Hosted VoIP system can basically result in a free upgrade. The overall cost of the solution is similar to what you're already paying today if not substantially lower. Even with the cost of new phones and a new network, the Hosted VoIP company is usually easier to work with and 'speaks the same language' as IT. There are a lot of great new features with VoIP, listed below in the section [Latest Features of VoIP](#). The primary features revolve around tighter integration, allowing people to spend more time actually communicating and making decisions and less time messing with their phone and computer.



Also good hosted VoIP companies come from the software IT world and they get IT and are easy to work with. With the new hosted VoIP service it is really easy to make changes, and things will get done. Customer service is good.

Many companies find they're wasting a lot of time managing the voice system and putting out fires. Or they simply can't manage it, resulting in downtime. Using a good hosted Hosted VoIP provider can save the organization a lot of time and prevent downtime. This can save the company a lot of money.

The problem with VoIP is that it is only as good as the network. It is essential that your Hosted VoIP provider 'own' the network. They have to manage the quality of service of your internet connections. They also have to take some responsibility for your internal network. If something goes wrong they need to know how to fix it. This usually means they'll tell you what kind of network to build that will provide quality of service. It may mean a totally separate voice network. They should also be empowered to fix problems.

So make sure your VoIP vendor has a top notch network and quality control in place so you don't notice a decline in voice quality. Make sure they approve your network as well. The good news is they can be much easier to work with from a customer service perspective. You can avoid the finger pointing when the phone company and PBX vendor blame each other. If anything goes wrong or you need a change you call one number and they take care of it immediately. Of course many VOIP providers can't do that yet.

With the top vendors you'll have superior service and won't have to worry about voice and managing your vendors. However you may find that PBXs can offer better features and a lower price point. The good news is that your Hosted VoIP vendor is constantly adding new features, and they won't charge you to upgrade.

Today's PBX

As it turns out the new PBXs on the market have a lot of the same new features as Hosted VoIP. Often they have better features. They may also be easier for you to manage as well, so there is less need for truck rolls and waiting for service. PBX vendors also know about reliability. Voice lines are also very reliable and can be very inexpensive vs. buying data T1s. We talk more about managing costs below.

The latest PBXs are offering similar services to Hosted VoIP - so you can get reporting, integrate outlook, click to dial, etc... In many cases their solution may be better than what you can get from a Hosted VoIP vendor. While the PBX manufacturers offer top solutions, you may find that by contrast the average local PBX vendors and phone companies supporting your new PBX generally don't get it. They may not understand some newer features like reporting. Making changes is complex and expensive, even simple changes. If there is a real problem responsiveness can be bad. Your phone company is probably even worse, and your PBX vendor



often doesn't manage them well. While many PBX vendors are great, with a traditional PBX solution overall customer service is bad to poor usually. This leads to companies firing their vendors to get Hosted VoIP.

Make sure your PBX vendor can be relied upon to 'own' the solution and fix any problems. If you call them they should be able to quickly determine the problem and deal with the phone company if necessary.

If a company is spending a lot of time managing the PBX vendor and phone company, or experiencing downtime, it is wasting a lot of money. So it can make sense for a company to get rid of their phone companies and PBX vendors, and use a VOIP provider instead (if the provider can support the network and the voice service.) This saves a lot of money lost through downtime and labor wasted on managing the voice system.

However the new PBXs may make management easier for everyone – no truck rolls for small problems, remote management, web interfaces, built in disaster recovery, etc. PBXs and voice lines are incredibly reliable – they don't break like IT systems. With a solid PBX vendor managing your system, the solution is hard to beat for most companies. So your Hosted VoIP vendor needs to be the best to compare to in house PBXs.

Latest Features of VoIP

These are only some of the features that get people excited about Hosted VoIP and new PBXs. Interestingly new PBXs can be better at these than Hosted VoIP.

- Better Call Flow
- PC / Outlook Integration
- Unified Messaging / Communication
- Presence
- New Phones
- Disaster Recovery / Business Continuity
- Easier Administration and Management
- Ease of adding locations and employees
- Find Me / Follow Me
- Remote Worker Support
- Remote Office Support
- Cell Phone / Blackberry Integration
- Voice Mail as E-Mail
- Call back from Voice Mail
- Inbound and outbound caller ID
- Easy transfer, parking, paging, transfer to voicemail
- Three way calling, conference calling outside of company
- Easy MACs - Moves Adds Changes
- Reporting

- Call logs
- Internal Directory Access
- Personal Contacts Access
- See Names of Inbound Callers in Contact List
- Unique Ring Tone
- Control of conference calls
- Call Center Capabilities

Managing Costs

Monthly voice carrier costs are a huge chunk of TCO Total Cost of Ownership for your voice system. Hosted voip companies can offer you a new phone system and often save you money, as their monthly cost is cheaper than your present phone bill. Luckily you can simply reduce your monthly voice costs, buy a new pbx and save even more money. Unfortunately your PBX vendor won't help you with that, though consultants like us can.

Generally companies spend \$1,000 per employee per year. A new phone system can cost \$1,000 to \$2,000 per employee.

Below is a sample breakdown of costs for a 60 employee office that buys a new system.

Voice Costs with New System at 60 Employee Office

	Total	Voice Costs	PBX	PBX's %
One Year Cost	\$135,000.00	\$60,000.00	\$75,000.00	55%
Two Year Cost	\$200,000.00	\$120,000.00	\$80,000.00	40%
Three Year Cost	\$265,000.00	\$180,000.00	\$85,000.00	32%
Four Year Cost	\$330,000.00	\$240,000.00	\$90,000.00	27%
Five Year Cost	\$395,000.00	\$300,000.00	\$95,000.00	24%

Over five years that new phone system is about 25% of total spending. Even if you don't buy a new phone system you'll spend 75% of the total cost of ownership of a new phone system.

This is one of the reasons why Hosted VoIP is so attractive - generally they can offer a total cost of ownership for a new system that is about the same as your old phone system. It is essentially free!

However if voice costs are aggressively managed, the total cost is significantly decreased. Costs usually can go to \$500 per employee per year.

Voice Costs with New System at 60 Employee Office

	Total	Voice Costs	PBX	PBX's %
One Year Cost	\$105,000.00	\$30,000.00	\$75,000.00	71%
Two Year Cost	\$140,000.00	\$60,000.00	\$80,000.00	57%



Three Year Cost	\$175,000.00	\$90,000.00	\$85,000.00	48%
Four Year Cost	\$210,000.00	\$120,000.00	\$90,000.00	43%
Five Year Cost	\$245,000.00	\$150,000.00	\$95,000.00	39%

When costs are managed, instead of costing \$395,000, your new phone system costs \$245,000, which is less than what keeping the old system would cost. Managing costs can pay for the upgrade to a new system.

To learn more about How to Manage Telecom Costs go to http://berlinpacific.com/art_manage_telecom_costs.htm

What Next?

As with everything there are tradeoffs. To summarize them again -

- If you don't know what you're doing don't buy Hosted VoIP. You have to have a solid provider – there's only a few. Stick with a PBX – it will work.
- If you can find a good Hosted VoIP provider buy from them. You'll probably save money and get a better level of service.
- If you are really good at managing monthly carrier costs, or work with someone who is, and you like your PBX vendor or find a good new one, you'll probably get the best price and the best features with a PBX.
- If your PBX vendor can't be trusted to manage the phone company and phone system, outsource the entire thing to a Hosted VoIP provider. Insist on one that can manage everything. It isn't the cheapest option, but it is very affordable. You'll never have to worry about voice again, and you'll keep getting upgraded to the latest technology.

Many executives and decision making parties need to select the right solution for their organization. Often they simply don't have the time to research all the potential vendors and their solutions. Managing costs is also very time consuming. Both are critical to making the best possible decision. If you can relate to this feeling, it might be worth getting the expertise of an independent consultant.

Outsourcing the process of managing telecom costs may be a good idea for your company. You can also leverage the experience of independent consultants like Berlin Pacific. We've helped companies like you through the exact same process of selecting a phone system. Every company is unique, and you can use us to help you find the solution that is right for you while also saving money and time.

[Anders Mikkelsen](#) is the Managing Director for Berlin Pacific. Berlin Pacific is a telecom consulting company that helps small and medium sized businesses cut costs and improve business operations. Please visit www.berlinpacific.com for further information.