

# VoIP is Coming in Loud & Clear

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**I**t seems everything in the world of communication is going digital: LP albums were sidelined long ago by CDs and iPods; film cameras have been overtaken by digital versions; movies, once shot exclusively on celluloid film, are now being shot digitally; and television, too, is going digital. It seems inevitable that telephones will someday go digital as well.

That day may be nearer than you think. Digital phone service provided over the Internet – called Voice-over Internet Protocol, or VoIP – is becoming more and more commonplace. Small- and medium-size businesses are finding significant advantages to moving their telephone service to this digital medium.

## What is VoIP?

With traditional telephony, there is inherent inefficiency because the line dedicated to a phone call carries nothing else during that call. Pauses between words and other idle time that leave empty “spaces” on the line cannot be used. No so for VoIP. By breaking the voice into digitalized packets, a line can be filled with multiple conversations and/or data streams, thus more efficiently using the network.

It's possible to use VoIP via your computer, where you talk into a microphone (such as on a headset), but more typically this technology is used with telephones like those you have always used. Calls can be made to anyone with a phone – cell phone, traditional landline or VoIP – and your computer does not need to be on for you to make a VoIP call.

VoIP is bought as either a stand-alone system, where the business owns and maintains the system, or as a hosted system. This is where a vendor has the server supporting the phone system on its premises, and the customer just plugs into that server. For many smaller businesses, going the hosted route is probably the best choice. This model requires only the purchase of IP telephones, and even these often can

be leased. Also, there's no need on your part for any technical expertise to maintain and upgrade the system, since this is provided by the hosting company.

According to *VoIPReview.org*, which compares various VoIP providers and publishes additional information about the technology, the cost for hosted VoIP services averages \$2,000 to \$3,700 per month based on 20 phones with a T-1 line. However, if you're really technically savvy, you might want to look into purchasing your own system because, in the long run, this might yield cost savings.

## Benefits of VoIP

One benefit of VoIP is its use of your computer network. Instead of needing both telephone and computer wiring at each workstation, only computer wiring is required. This also makes expansion easier and cheaper, since adding phones just means adding a connection to the computer network. Actually, this is something you would probably do anyway, because if you're adding an employee, you would want that employee to have a computer connection.

Lots of claims are floating around about how much VoIP can save a business owner. *VoIPReview.org* claims on its Web site, “a VoIP service can help you save up to 90% of your monthly phone bill.” Microsoft's VoIP offering called Response Point ([microsoft.com/responsepoint](http://microsoft.com/responsepoint)), says on its Web site, “save up to 51% in your phone bills by switching to VoIP.” Response Point is aimed at businesses with up to 50 users.

Will VoIP really save you money? It depends on how much you currently pay for phone service, what your needs are and a myriad of other considerations.

Don't just look at what the monthly cost per phone will be. For example, pay attention to your computer network. Is it fast enough and powerful enough to handle VoIP? You absolutely need a broadband (cable or DSL) connection; don't even consider VoIP if all you have is a dial-up connection. But some



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observers say cable or DSL is not enough, and that you need even more, such as a T-1 line. Have your VoIP vendor check the suitability of your computer network for VoIP. If you have to pay a lot to upgrade your network, VoIP may not be such a great bargain.

While claims that VoIP can save money draw attention to the technology, a few other aspects may make it worth your while, even if it proves not much cheaper than your current phone system. Easier management of your telephone system is a potential benefit, since the technology doesn't involve a separate system from your computer network and you have the opportunity to outsource the function via a hosted system.

The availability of features for little or no cost above the basic VoIP rate is another potential benefit. VoIP systems tend to be feature-rich, including:

call queuing (placing calls in queue to be answered in turn); remote office features (integrating remote office locations to function as part of the main office – useful to businesses with remote offices, traveling salespeople or employees working from home); faxing; call forwarding; conferencing; auto attendant (provides caller with options to transfer to another phone or leave a voicemail); and centralized communication (from their Internet browser, users can access e-mail, voicemail and fax). VoIP lets you take your phone anywhere in the world, have the same phone number and be able to access your calls, providing considerable mobility.

Increased productivity is also a potential benefit. The ease with which users can communicate and their ability to access the system from a browser are among the ways VoIP can boost employees' productivity. One study claims that VoIP can save

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As with any technology, VoIP has its potential downsides. Emergency services may have trouble properly locating a VoIP systems when a 911 call is made. Ask your provider about this. Voice quality has long been a source of concern with VoIP. When the technology was young, the quality of the service didn't equal that of a landline system. But in recent years, the technology has improved, and some observers now say it equals that of landline and cell phones.

VoIP is offered by a variety of companies, including Verizon, Microsoft, Vonage, Skype and others. Check out *VoIP-Providerslist.com*. It claims a list of 699 VoIP providers in the U.S. Some companies will give you a 30-day free trial. Take advantage of this. Check out the quality of the connection, ease of use, cost and productivity gains. 🌐🌐

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