



## **IS IP TELEPHONY RIGHT FOR YOU?**

### **Understanding IP Telephony and Voice Over IP (VoIP), How they Differ, and How They Benefit Your Business**

by Mark Wadnizak  
Voice Smart Networks  
[www.VoiceSmartNetworks.com](http://www.VoiceSmartNetworks.com)

As you consider upgrading your telecommunications equipment, you are bound to hear that VoIP (pronounced VOYP) is the next big thing in phone system technology. As you weigh the options available, you will have to ask yourself the question, is IP Telephony right for your business?

#### **What is VoIP? What is Internet Telephony?**

We hear the two terms often used interchangeably. Are VoIP and Internet Telephony the same thing? While the technical definitions are pretty similar, the popular definitions are of two very different things. Most people associate VoIP with Voice over the Internet. Cheap phone and long distance service are the things that come to mind with that term.

How it all works is that voice waves are converted to data and transmitted as 'packets' of data from one location to another. Because it is now data, it can travel over the same network as other data. This way of sending data in packets is the backbone of how information is sent over the Internet, thus the "Internet Protocol" or "IP" part of VoIP and IP Telephony. Once it reaches its destination it is converted back to voice waves.

The difference between the two has more to do with the popular definition of VoIP, which focuses more on the Internet portion. There's a great rush to market products and services based on the so-called dramatic savings of voice over the Internet. In fact the lofty promises make it seem more like modern day high tech snake oil. Too often the promises are thrown out there but there is no attention paid to the poor quality that usually goes with. Too often it's not until you're locked into expensive equipment or long term service commitments that anyone ever says anything about the fact that the quality is only as good as the Internet connection. If you've ever noticed the dramatic slowdowns on the Internet at around 4 or 5 PM when everyone's just getting home, downloading music and checking email, etc, you can start to imagine why there are quality issues with VoIP.

IP Telephony is the term that has more to do with using equipment that uses the Internet Protocol (not the Internet) as a means to transmit voice throughout an organization. The flexibility of data nowadays and the ability for it to be transmitted quickly and reliably over great distances makes it a much more versatile way of providing voice communications than the older style telephone systems.

#### **How IP Telephony Benefits a Business.**

More than just being the next big thing, IP Telephony brings tangible benefits to businesses today. The most obvious areas are in the way it allows businesses to seamlessly integrate their communications

over large areas or multiple locations. Older style telephone systems could do some networking but the integration was always incomplete, because it was still a matter of very distinct systems with their own controls being operated separately. Data transmissions over a wider network are much easier and more complete, and this benefit is especially seen where an office in Los Angeles can now literally be part of the same phone system as an office in Las Vegas.

The second best known benefit is that once a high quality data connection is established between two locations, voice signals can now utilize that same connection without any per-minute tolls being accumulated. This can add up to tremendous savings for an organization, either reducing or totally eliminating the cost of long distance calls between offices.

There are a number of other benefits that actually have a much greater and even more positive impact on a company's bottom line than the ones listed above. Because it utilizes data in the way it does, it's easier to integrate IP Telephony with the computer network, allowing greater efficiency. Consider a busy individual who spends the whole day making and receiving phone calls. Instead of looking up information on the computer for each incoming call, that person now has that information at hand the moment the phone rings. Outbound calls are made at a click of a mouse, allowing dramatic improvements to productivity. Flexibility like this allows businesses to create applications that handle calls more efficiently and in a matter that greatly increases customer satisfaction.

Often the instruments themselves are more intelligent and usability is higher. While older phone systems had a lot of features they were often useless because people didn't know how to use them. The data aspect of IP Telephony makes the interface much more intuitive and allows people to get greater utilization of the capability of the system. Desktop applications make the systems easier to manage and administer, and moving a phone to a new location no longer requires a service call to switch wires around. IP Telephony allows greater utilization of the phone system by people outside the home office, allowing road warriors and home based workers the ability to work as though they were right there in the home office. All of these things add up to greater productivity and capability.

### **When Is IP Telephony best for a business?**

The most obvious areas of benefit are when a business has multiple offices, especially when those offices are in different communities. Companies who have people who are often on the road, or companies that might benefit from having workers based out of their homes. Any organization that has a lot of transition, either people moving around within the office, or a fair amount of turnover, will benefit from having more manageability.

And what if you don't have any of these things? Maybe you have a simple office that doesn't have a lot of change and only one location. The main thing you may want to consider is that you are about to make a significant investment in whatever type of system you are about to install. Keep in mind that the major manufacturers are putting little to no money into Research and Development on older style Key Telephone Systems or PBX Systems. That money is going almost exclusively into their IP Telephony products. The capability of an IP Telephony system will have benefits for you, but most importantly, you have a better chance of protecting your investment by avoiding obsolescence when you go with an IP Telephony option.

Keep in mind that one should never invest in technology just because it is technology. Like any other technology you invest in, it should have a positive benefit to your bottom line and/or it should make you more competitive. Because of the efficiencies and the usability of IP Telephony, your

telecommunications system today has a far greater chance of meeting those criteria than ever before.

### **About the Author**

Since 1982 and the very beginning of the deregulation and privatization of the telecommunications industry, Mark Wadnizak has been owner of Southern Counties Telephone, Inc, dba Voice Smart Networks in Ventura, California. He started the company with his father, and in 1986 assumed the role of President and CEO. He is responsible for growing the company from a small cabling and telecom company to one of the largest and most respected telecom companies in California known for its exactitude in engineering and innovative, solution specific technical expertise. Mark has steered Voice Smart Networks through several incarnations and adaptations in the marketplace as the telecom industry has moved from analog to digital to voice and data to voice over internet protocol (VoIP) and complete integrated voice and data convergence.

Mark was born in Ventura in 1960, and was educated in London, England from prep school through London University Queens College where he studied physics. The transmission of sound has always interested him, and his first entrepreneurial venture – begun at age 19 – was his founding of the company, Andromeda Lighting and Sound in Belfast, Ireland. Andromeda eventually became one of the largest sound and lighting companies in all of Europe. Mark sold his interest in that firm and departed for the U.S. and the telecom business in 1982.

Mark's involvement in the telecom industry has always evolved around his technical expertise and superior engineering capabilities and efficient customer service applications. Even though he has maintained his leadership role in the company, he has still maintained his current certifications for Mitel, Inter-Tel and Shore Tel telecommunications systems, and he is Cisco CCNA qualified.

Mark is married, lives in Ventura, California, and enjoys skiing, fishing abalone, diving and reading.