

Talking Technology

Voice technology uses the Internet

By Steve Burns, Capital News contributor

Dhugael McLean, chief technology officer at YourTechOnline.com, comes into my office last Friday, plugs in his Mitel 5020 IP phone into my Shaw Internet connection, boots up the phone and is ready to make or receive calls over the Internet within about 30 seconds.



This "portable phone," called a voice over IP (Internet protocol) phone, is available to him wherever there is a high speed internet connection. Amazing technology.

Voice over IP technology supports two-way transmission of voice traffic over a packet-switched IP network. This network could be a public carrier network, the Internet, or a private enterprise intranet.

The term "Internet telephony" normally refers to voice over IP services transported over the Internet.

The first widely used Voice over IP application appeared in the mid-1990s, with services that enabled Internet users to make free voice calls between specially equipped PCs, or between a regular phone and a specially equipped PC.

Even though quality was often erratic, users found this early Voice over IP technology a great way to save on long-distance and international calls.

Voice over IP has come a long way since then.

For one thing, voice quality on managed IP networks can match the public voice network.

The IP networks are far more bandwidth efficient and the costs have been reduced substantially.

"We wanted to use voice over IP technology to allow our business to run from anywhere.

As our business delivers interactive, online technical support we wanted to take our company to the next level.

To do this we either need to invest in more office space to have us all operating from the same location or invest in technology that allows our team of technicians to be completely mobile." said Mr. McLean.

"Another critical aspect to us was that whatever technology we chose; we needed it to be 100% reliable. Missing a call or misdirecting a call from a customer is not acceptable. Also, allowing us to distribute calls efficiently to available technicians is very important. The call distribution system built into the voice over IP system ensures that not only do no calls go to voicemail but every call is distributed to the right person at the right place at the right time. For instance, you could call our main number, 1-866-717-7111, and you could be talking to our available technician located in Texas."

"Our eight technicians love the freedom of being able to work from anywhere. They really do not want to work in an office environment and enjoy the flexibility that our new voice over IP system brings them. The math is simple – we see our company having 20 to 30 techs in the future and we simply do not want to purchase a building to make that happen. "

We can have the best techs in North America available to our customers no matter where they are located.

"One of the great things about our voice over IP system that we purchased from Tops Telecommunications (www.topstelecom.com), is that we can have a two hour interactive staff meeting over the Internet using the phone and web-meeting technology and not incur any long distance charges."

Most people think that the voice quality will be lower over an IP network. I talked to one of their technicians over the IP phone and it sounded crystal clear to me. The quality of the voice transmission was at least equal to regular phone lines.

If this technology is so good, why hasn't it caught on more? The main reason is that most people do not know that this technology exists, that it is reliable and that it is not cost prohibitive. According to Mr. McLean, the total investment for this turnkey voice over IP system was about \$30,000, which includes all of the software, phones, licensing fees, etc. This investment is expected to have a relatively short payback period.

"Since we have installed this new system, we have not only virtually eliminated our long distance charges but we have not missed a phone call with our automated system. Every call is answered and distributed properly, which makes our customers and investors very happy."

"Our next step is to invest in the soft phone, which will allow the technician to answer the phone call over their PC with a headset," said Mr. McLean.

While there are likely still some skeptics out there, voice over IP is here to stay. With significant cost reduction opportunities, the ability to have a distributed workforce and the enhanced productivity will make this technology an attractive investment. With new applications being developed such as collaboration and unified messaging,

this will allow employees, wherever they happen to be, to team more effectively and be more productive.

So here is my summary:

Cable for Internet connection: \$20

IP Phone: \$800

Long distance savings: \$15,000

Total IP System: \$30,000

Employees able to work from anywhere they chose: priceless!

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Quote of the Day

"A true friend is an angel, who picks you up off of your feet, when your wings don't remember how to fly."

—Aristotle (320 BC)

[Short story](#)