

The next big ring

How to run your business more efficiently and save money with a new voice network

BY MATTHEW LAWELL

Shortly after the opening credits of the film "Tomorrow Never Dies," James Bond received a cell phone from the Q Branch of the British Secret Service. The phone was able to transmit incoming and outgoing calls, of course, but it was also able to scan, analyze and transmit fingerprints, and pick locks with a stylized antenna. And it could also fire away as a stun gun.

Not bad for 1997.

A little less than 13 years later, there is nothing that lethal anywhere in the world of telecommunications. There are, however, plenty of developments, especially regarding Voice over Internet Protocol, or VoIP, that might make you feel a little bit like 007. And cut a chunk of money from your monthly expenses.

Developed in earnest during the first Internet boom of the early 1990s, VoIP utilizes the Internet to make inexpensive, if not free, phone calls to just about any number around the world. All you need is a computer, broadband Internet access and a voice on the other end of the digital line. For years, media and industry experts trumpeted VoIP as the next big thing, but the Internet capabilities lagged behind the technology, leading to garbled conversations and snowfalls of static.

With the rise of faster and more efficient Internet access during much of the last decade, VoIP increased in scope and performance. Dartmouth University installed a network across its campus in 2003. Oprah stumped for a popular VoIP service last year. Even the government is starting to take advantage of the new technology, with the Social Security Administration in the process of converting to a VoIP network at its more than 1,500 field offices.

All of that combined means that VoIP is not the next big thing. It is the *now* big thing.

"The entire industry has gone beyond the experimentation phase," says Tom LoFrisco, executive director of business product management, AT&T. "Carriers, manufacturers, everyone is headed in the direction where they will be able to supply Voice over IP.

"It's decided. It's a business standard."

Make technology work for you

What makes VoIP so special is what it is able to do for you, for your business, for telecommunications as you know it.

There are the audio and video calls, which



If you install a VoIP network through a larger carrier, your voice and data will be more secure than if you use the public Internet. And though the cost to install a new network is high, you will likely be able to save between 20 and 30 percent on your monthly bill — and you will have plenty of new tools that might well change the way you do business.

are available for either nothing or next to nothing on a number of popular Web sites. But if you choose to rely on those sites and the public Internet to run your business, industry experts say that you will leave yourself susceptible to many of the problems common to insecure data networks, including hackers, spyware, malware and any number of viruses.

A better option might be to install a VoIP network through a larger carrier to ensure that your voice and data will be secure. The cost to install a new network is high — normally between \$20,000 and \$30,000 for businesses with 50 or so lines, though quotes and actual costs vary case by case — but the savings can add up thanks to the 20 to 30 percent that most industry experts say you can save on your monthly bill. And besides, you will have plenty more tools, the kinds once thought limited to secret agents, to enhance how you do business.

"There are just a slew of new features that existing networks don't have," LoFrisco says. "There's 'Find Me Follow Me,' where calls can ring your different assigned handsets simultaneously. There's integration with other voice applications. And the key is that most of those features can be provisioned and managed at the user level."

Many of the features provided by larger carriers have been available for more than a decade but at a far higher price. As recently as a couple of years ago, only Fortune 500 companies and the like were able to afford IP features, including unified messaging, where your voice mails are converted to text and arrive seamlessly with your e-mails, and secure access to the company network for employees working anywhere in the world.

"I have an application that runs on my computer that, wherever I am in the world, as long as I have broadband Internet, everybody else in the corporation can see where I am — if I'm working remotely in Washington, D.C., if I'm in a meeting in Albany or Dallas — and then I'm available to communicate in multiple ways with my colleagues," says Stephen Brown, vice president of U.S. Systems Engineering, Mitel. "They can instant message me across the network, they can click to call me, which will route the call to the soft phone on my computer or a desk phone where I've logged in.

"It really reduces a lot of the complexities from a communications perspective."

Your employees can even work from home

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with the same equipment, technology and access available to them at the office. Just hand them a VoIP phone, tell them to take it home and plug it in, and they will be able to work and sound as if they are at their desk. This feature is ideal for call centers and companies that offer 24-hour service because it opens the door to hire remote workers across the nation and around the world. It will also benefit employers who might want to decrease the size of their office and the amount of their rent but maintain the size of their work force or smaller companies that want to appear bigger to customers.

Think about the future

Though VoIP networks might initially seem like some sort of futuristic technology that will be difficult to install and more difficult to understand, it will likely be an easier transition than rotary to touch-tone or analog to digital. You might not even need to install new phones or schedule much time, if any, to train employees on how to maximize use of the new features.

“To use VoIP, yeah, there is some additional training, but people come up to speed very quickly, it’s pretty straightforward,” says David Montieth, president of commercial services, West Region, Time Warner Cable. “In the early days of switching telecom providers, the whole numbering process was a little challenging, but it’s pretty seamless today.”

If you can figure out how to use your remote control to flip channels, record your favorite shows and insert a DVD with the push of three buttons, you will probably be able to figure out a few additional features on your phone, especially if they help you run your business more efficiently.

Of course, a VoIP network might not be necessary for all businesses. If you have only one office and a handful of employees who never work in the field, if you receive far more calls than you send or if you want to install the newest technology just to say that you have it, you probably have little need for VoIP. But if you have offices in multiple cities, even multiple states, to tie together with one network or if you have any employees out in the field, a VoIP network might be a sound investment.

“The cost of voice is so low anymore,” Montieth says. “It’s unbelievable how far it’s come over the last 10 years. So, for my business, I want to make sure I have as clear a conversation as possible at the other end.” <<

3 Questions

Monty Ferdowsi |
President |
Broadcore |

Monty Ferdowsi has more than two decades of experience in the telecommunications industry and has more than five years of experience as president of Broadcore, a nationwide provider of hosted unified communications services. He has worked with VoIP development for much of the last decade, both as a professional and as an educator.



Q. How might business owners and executives be able to benefit from installing a VoIP network?

One of the benefits of being able to have IP is geographic independence. The IP network allows you to take your phone to a larger network, perhaps over the Internet. The traditional network, the TDM (time-division multiplexing) network, isn’t as portable. You cannot easily take that out to a remote site; it isn’t transportable. The IP network gives you that transportability.

Q. How have you seen your customers take advantage of that portability?

Customers can take their phones outside of the managed network — they can, for example, take it home and hook it up to their cable modem or to their DSL — and that allows businesses to be very productive. They can take home a phone if they need to because of the flu virus or because of traffic. Maybe it would be a good idea to allow people to work from home for a short period of time.

Q. What are the security concerns and dangers of a VoIP network as compared to a traditional network?

Once your voice hits the public Internet, if somebody is sniffing the Internet, they can get not just your voice conversation but any information that you have on the Internet. So it’s not so much that somebody is entering your network — that’s what a firewall does, it keeps people out — but when you’re trying to communicate with the outside world, you’re actually sending packets out, and if somebody has the capability to come in and sniff it, your information is out there. For small and medium businesses, I don’t see how that can be an issue. But if you’re taking your phone over the public Internet, obviously, anything on it can be monitored.