

VoIP: Hype or Reality?

Chances are you know someone who's using free or consumer-class VoIP solutions and making long-distance calls for "free". But is this "Voice over IP" or VoIP technology suitable for organizations like yours? Will it provide the business-class security and reliability you expect in your phone system?

VoIP (Voice over IP) is the technology used to transmit voice conversations over the Internet or through any other IP (Internet Protocol)-based network. With VoIP, voice conversation is broken up into packets of data which are transmitted over the Internet or over a proprietary broadband network before being reassembled on the terminating end of the call.

Business-class VoIP provides tight integration between the desktop you use everyday today and the phone system that today runs on a separate technology. Now, the email, calendaring, and instant messaging on your desktop becomes integrated with the telephone, video, audio conferencing and facsimile of your VoIP solution. The benefit to you? Single directories, unified messaging, and self management of your phone configurations all from one interface.

Is VoIP a Fad or a Legitimate Trend?

Recent research indicates that VoIP is here to stay. A November 2005 survey by Infonetics Research found that VoIP adoption is well under way, with 14% of small-, 23% of medium- and 36% of large-sized organizations already using VoIP products and services. By their estimates, nearly half of small and two-thirds of large organizations in North America will be using VoIP products and services by 2010.

Osterman Research also believes that the market for VoIP will increase substantially, growing from 13% of all email users in 2005 to 64% of all email users in 2009.

The bottom line is that both consumers and large and small organizations are using VoIP today in a stable, secure and productive manner.

Benefits of VoIP

VoIP solutions, unlike traditional phone systems, are not separate from the data infrastructure. Voice and data networks are converged, reducing operating costs and increasing employee productivity. Nearly three in four organizations surveyed by Osterman Research indicated that lower telephony costs were a motivating factor to move, while many feel that improved user productivity and improved communications with remote sites are key motivators.

Indeed, there are three major reasons to use VoIP:

- Increased functionality
- Improved productivity and mobility
- Lower cost

Increased Functionality

VOIP makes easy some things that are difficult to impossible with traditional phone networks. Standard features include call forwarding, hold & transfer and 3-way conferencing. Advanced features include:

- Simultaneous ring, enabling one incoming call to ring multiple phones simultaneously, so that users can answer that call on their cell phone or home phone, for instance, when someone calls their desk number.
- Selective call forwarding, enabling calls from certain individuals, or within certain time periods, to be forwarded to a different phone number.
- Remote forwarding, enabling users to use any phone located anywhere to remotely forward calls from one phone to another.
- Unified messaging, enabling users to receive and listen to voice mail in their mail inbox; the voice mail is attached as a .wav file.

- User self service, enabling users to control various features and functionality either from a web browser or by telephone.
- Click-to-dial, enabling automatic dialing when users click on a phone number in their email, on a web page, in a corporate or personal directory or in other LDAP directories.

Improved Productivity and Mobility

The predominant tools you and your employees use every day are email and their phone. VoIP solutions integrate these tools to make employees more productive. When users get a voicemail in their VoIP mailboxes, they also receive an email in their Outlook inboxes with the voice mail attached as a .wav file. They can then save, delete, organize and manage voicemails in the same way they manage their emails.

VoIP is a great time-saver and productivity tool for your telecommuting employees, mobile workers, and “road warriors”. It can enable you and your organization’s employees to connect anywhere in the world and appear as though you never left the office. You can forward all calls to a cell phone or other landline, forward calls from specific numbers to your cell phone or other landline, allow your desk and cell phone to ring simultaneously or sequentially with the same incoming call, and receive calls transferred from anyone in the office to your VoIP phone, cell phone, or landline no matter where you are. Employees can take their phone or use a “softphone” right on their desktop to make VoIP calls.

Your IT staff also becomes more productive, as they spend less time providing Help Desk support for the telephone system. This is because users are able to independently perform all their calling and configuration management in a familiar interface (through their email client or web browser), managing their phone calls from wherever they are. In addition, the IT staff doesn’t have to reconfigure the PBX with every move.

Lower Cost

Many organizations find that the cost for a managed VoIP network can be significantly less than a traditional PBX environment. VoIP providers offer flat fee telephony plans that include local phone calls as well as domestic long distance.

If you have multiple sites, VoIP typically provides cost savings because expensive PBX systems don’t have to be set up at each location. There are also some cost savings due to using a single network to carry voice and data. This is especially true if you have existing under-utilized network capacity that you can use for VOIP without any additional costs, or if you’re expanding to new offices and don’t have to wire multiple networks.

What about Security?

Even with all of these benefits, you’re probably still asking a critical question: Is VoIP secure enough for my organization to depend on? The answer is... “it depends.” More than half of businesses surveyed by Osterman Research cited security as a potential issue in their deployment of VoIP systems. But many providers offer business-level security through their VoIP solutions.

The key lies in your network security – if your network is adequately secured for running critical business applications, then that security will also effectively protect voice systems. In fact, according to Cisco Systems, a provider of on-premise VoIP solutions, a properly secured IP telephony network can be more trusted than a PBX system because of the coverage and sophistication of network security technologies. In addition, converting voice traffic to data bits prevents the most common methods of service theft, eavesdropping, and disruption that are used on traditional PBX and voicemail systems.

Hosted VoIP solutions, such as those from BroadSoft and mindSHIFT, automatically provide strong, carrier-grade security by centrally managing firewalls and server security patches and fixes. Hosted service customers don’t have to spend many time-consuming man-hours doing these activities. Hosted equipment also typically has excellent physical security because it is in a well-guarded, secure data center. To minimize and eliminate threats from outside of the network, it’s a good idea to implement a private connection to your carrier.

What about Reliability?

The greatest concern among prospective VoIP users is quality; consumers have complained about poor sound, dropped calls, and intermittent loss of service. The best way to ensure quality is to get VoIP from a business-class provider such as mindSHIFT, which specializes in providing VoIP for small- and medium-sized organizations. A business-class VoIP provider ensures quality by providing:

- an enterprise-class switch and infrastructure
- bandwidth directly from your site to the provider's network, instead of over the public Internet, and
- trained engineering staff

Additionally, get a dedicated Internet connection separate from your data network. This not only ensures availability of the phone service, but also allows you to isolate your VoIP system from any viruses or attacks that threaten your organization.

The On-Site vs. Managed Service Question

Once you've decided to implement a VoIP solution, you need to determine whether to deploy it on-premise or as a hosted solution. Both types of implementations can be managed by an experienced Managed Services Provider (MSP).

The key benefits to purchasing an *on-premise system* are greater control and the potential for customization that leads to greater integration of the phone with applications. But along with control and better integration come responsibility and cost.

One key advantage of deploying *hosted* VoIP services is the ability to continue operations (specifically phone usage) during and following any disaster, such as a snowstorm or hurricane which causes a power outage and makes your offices unusable. In such an unfortunate event, your employees can still make and receive phone calls using their main business number. As long as they can connect to the Internet, they can use and manage their phone service. The benefit to you is clear: your users don't miss a beat. They can continue to work.

Other benefits of the *hosted* model are the following:

- Ease of growth and expansion
- Simplicity and speed of deployments in multi-office environments
- Savings in upgrades (upgrades are performed by the MSP behind the scenes)

Advantages and Disadvantages of On-Premise vs. Hosted VoIP Solutions

Feature	On-Premise	Hosted
Cutover from existing equipment to new VoIP solution	Subject to "customer-not-ready" issues	Can overlap
Staffing	Required	Minimal
Business continuity/disaster recovery	Maybe, if architected by IT staff and additional investments are made	Yes
Scalability	Requires IT staff or qualified MSP to manage switch and trunk capacity, performance and configuration	Capacity is carefully and regularly managed
Moves, adds, changes, repairs and maintenance	Can be faster	Fast if provider has an SLA (Service Level Agreement) for turnaround times
Security	Requires firewall management, intrusion detection and regular security patches/fixes	Carrier-grade security management for voice communications, with typically excellent physical security and worry-free updates
Reliability	Can be backed up, but requires internal resources and storage or MSP management	Typically high levels of redundancy
Custom Applications	Excellent	Light to Not Available
Technology life cycle and obsolescence	Technology becomes dated after 3 years and must be replaced by organization's IT staff	Technology is regularly updated behind the scenes by the Managed Services Provider

In summary, an *on-premise* VoIP implementation would provide organizations with greater control/ownership, a greater ability to customize and the ability to integrate third-party applications. The *hosted* VoIP solution would not only be better if your organization has multiple offices or is expanding offices, but would also provide better disaster recovery, enable easy upgrades, require less staffing/expertise and cost less upfront.

Conclusion

Integrated voice and data will make significant inroads over the next five years. As vendors increasingly focus their production and R&D efforts on VoIP systems, legacy PBX systems are becoming more costly and difficult to maintain. The future is VoIP.

Whether you implement an on-premise or hosted solution, your organization can join other organizations in realizing a powerful combination of benefits: lowered telephony cost, improved productivity, and increased mobility for your employees.

The Strength of mindSHIFT's VoIP Solutions

mindSHIFT's success and extensive history in managing customers' IT solutions within their sites and on their desktops enable us to manage your VoIP solution, as well, providing quality next-generation features, future-proof architecture, excellent functionality and world-class technological support. Your mindSHIFT Managed VoIP solution will integrate with your email server, its components will run on your workstations, your users can control their preferences, and your laptops can now be fully functioning phones.

The mindSHIFT Advantage is the freedom to work worry-free, knowing your VoIP system is built upon world-class technology and managed by world-class technicians. It's the freedom to focus on your core business. It's the freedom to grow, succeed, and prosper.

Get the freedom to focus on your core business. Get the mindSHIFT Advantage.

Whatever your organization's specific requirements, mindSHIFT has a Managed VoIP solution for you. Select from a hosted solution or a dedicated VoIP solution and benefit from the mindSHIFT Advantage.

About mindSHIFT Technologies, Inc.

With operations in Boston, New York, Philadelphia and Washington D.C., mindSHIFT is a leading Managed Services Provider (MSP) offering managed services, professional services and VoIP to small- and medium-sized businesses. The company's portfolio of managed services provides a comprehensive solution which includes such critical services as email management and administration, electronic backup for servers and desktops, virus and spam protection, desktop support, server management and VoIP. All customers are supported by both a 24-hour Network Operations Center for proactive management support and a call center which diagnoses and resolves all end-user desktop issues. For advanced and larger businesses, the company provides business application migrations, storage area network upgrades and complex hosting applications. Additionally, mindSHIFT has superior expertise and experience in meeting the complex demands of the legal community for the integration of applications such as document management. For additional information, visit www.mindshift.com.

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