

# Ten Steps to a Successful VoIP Implementation

What Every Business Should Know

Written by Thomas Cross, CEO, TECHtionary.com

xo.com

# **Table of Contents**

ABSTRACT         .1           INTRODUCTION         .1           STEP 1: IDENTIFY BUSINESS AND USER NEEDS         .2           Determine Business Goals         .2           Assess End-User Needs         .2
STEP 2: UNDERSTAND HOW VOIP WORKS.3STEP 3: ASSESS YOUR NETWORK SITUATION.3Understanding Where You Are Now.3Network Checklist.3Ensuring the Highest Quality of Service.4Optimizing Bandwidth for Performance.4
STEP 4: IDENTIFY THE RIGHT PARTNERS/PROVIDERS.4Do Not Try This Alone.4What's Needed?.5Creating a Short List: Service Provider Checklist.5Going for a Demo and "Test Drive".5Experience Is Key.5
STEP 5: DESIGN THE SOLUTION6Types of VoIP Services.6Conduit and Cabling.8External Connections.8Making Changes.8Checklist for Designing a Solution.8
STEP 6: SELECT A PROPOSAL.9Evaluating Proposals.9Proposal Checklist.9Making an Informed Decision.9
STEP 7: INSTALL AND TEST10Making a List and Checking It Twice
STEP 8: MANAGE SERVICE AND SUPPORT11Training.11Support Issues and Response Times.11Understand What's Different.11Training and Support Checklist.11Clarify Service Expectations.11
STEP 9: Understand Your Bill
STEP 10: CONSIDER FUTURE OPTIONS
SUMMARY: WHAT EVERY BUSINESS SHOULD KNOW

# Ten Steps to a Successful VoIP Implementation:

# What Every Business Should Know

By

**Thomas Cross** 

CEO, TECHtionary.com

#### **Abstract**

TECHtionary.com, a Web-based source on the latest technology, and XO Communications, a leading provider of telecommunications services for businesses, recommend how to implement Voice over Internet Protocol (VoIP) to business owners who are considering VoIP but are unsure of how or where to begin. This paper outlines a systematic, ten-step process – from identifying needs to considering future options – and includes handy checklists to help streamline the implementation process.

#### Introduction

In the beginning, the very beginning, voice or rather mumbles were heard. Thousands of years later, Alexander Bell put that voice on a wire. Even then, skeptics thought the telephone was a nuisance. As one executive put it, "I have messenger boys to do my business." A hundred years later, the Internet (i.e., VoIP) is changing it all again. After a decade of research and development, business-class VoIP is now available and offers many advantages and business-enhancing possibilities. Here are some of the "hottest" benefits and features:

- Lowers Total Cost of Ownership (TCO) TCO is the overall cost benefit and savings coming from one-time or Non-Recurring Charges (NRC) and ongoing or Monthly Recurring Charges (MRC), which includes network, local and long distance usage, management of services, maintenance of equipment, as well as soft-dollar savings in the form of productivity improvements.
- Enables Personal Administration of Service and Features Moves are a breeze. You don't need a Telco tech; the Office Manager and end user can make changes themselves.
- Simplifies Billing Bundled voice and data services are all on one bill from one provider.
- Enables Unified Messaging and Integration with Microsoft Outlook Enables users to receive voicemail as email, for example.
- Supports Multiple Sites Transfer calls seamlessly between offices to workers at other branches.
- Improves Audit Trail Log all communications for improved "bill back" audit trail.
- Reduces/eliminates the concept of "local" versus "long distance" and variable per-month charges – Receive one flat monthly charge for all calling.

If there is nothing on the list above that appeals to you, then stop reading now and re-evaluate VoIP in another year. Why? Because one thing is certain: The technology will change to meet your needs. Should you wait? Here's what one VoIP customer from XO Communications recommends:

"This paper outlines a systematic, ten-step process – from identifying needs to considering future options – and includes handy checklists to help streamline the implementation process." "VoIP, maybe a few years ago, might have seemed a little mysterious but, at this point, it's a proven technology. It works, it's easy, the install is easy, there is no question, there is no reason to wait; the sooner you do it, the sooner you start saving, the simpler it gets."

-Jasch Hamilton, Founder & President of Diamond Organics, Moss Landing, CA

Here, in a step-by-step process, is what you need to know about VoIP before you buy it and implement it.

# Step 1: Identify Business and User Needs

#### **Determine Business Goals**

Before considering the deployment of any communications technology, the first step is to identify the business goals you hope to achieve with this change, for example:

- Increasing productivity
- Improving service levels and customer experience
- Increasing revenue
- Reducing expense

Once you've prioritized your business goals, identify the specific capabilities you need to attain them. For example, if your main goals are to increase productivity and reduce expense, then you might examine how the time and expense associated with supporting moves is affecting employee productivity and costs. To develop your list of business goals, complete an internal discovery, involving the leaders of key functional areas. Then share the list with your potential technology service partners so they will be sure to design VoIP technology solutions that address your business needs.

#### **Assess End-User Needs**

Nearly every paper or book on implementing technology says that there should be an assessment of user needs. Yet, very few users are ever interviewed, much less have their needs incorporated into the technology agenda. Why? Because, like deciding what to have for dinner, users want too many different things and frequently don't really understand what is being asked of them.

Since VoIP brings an exciting list of new capabilities, it's hard to assess what features have the most value prior to use. So presenting users with a lengthy list of features and benefits isn't the best way to identify their needs.

To keep it simple, show the "hottest" features to end-users and prioritize their response, based on how well these features meet business goals. For example, integration of voicemail into email is a powerful and valuable VoIP capability that can have a tangible impact on user productivity. In interview after interview users say, "I'm in my email all day and to be able to see my voicemail, prioritize whom to call back first, and forward to others saves me up to an hour a day." One hour, or even 30 minutes, x 10 people x 20 business days in a month is a lot of time and money.

If you prefer more traditional needs assessment strategies, try onsite interviews, focus group sessions, or a written survey. If you find there is strong interest in VoIP, then get going on the next steps.

"To develop your list of business goals, complete an internal discovery, involving the leaders of key functional areas. Then share the list with your potential technology service partners so they will be sure to design VoIP technology solutions that address your business needs."

# **Step 2: Understand How VoIP Works**

A basic understanding of how VoIP works will provide context to your entire implementation process and help improve communications internally and with potential vendors.

VoIP works by taking your voice and putting it into a package called a "packet". The packet is sent one of these ways:

- Public IP Network (a.k.a. Bring Your Own Broadband, BYOB) For business use, the "BYOB" approach is not recommended. It's a better solution for home or casual use. Cable modem, Digital Subscriber Line (DSL), wireless, satellite (coming soon), and the public Internet are typically designed for "best efforts" level of service. And, not all carrier networks are alike. VoIP traffic must be treated with the highest priority in order to minimize latency, jitter, and packet loss all of which can negatively affect call quality.
- Private IP Network or Virtual Private Network Business-class VoIP providers, such as XO Communications, use a Virtual Private IP network to guarantee security and performance (discussed further on p. 8, "External Connections").

For an excellent Intro to VoIP, refer to the XO Resource Center at at http://www.xo.com/learnvoip.

# **Step 3: Assess Your Network Situation**

# Understanding Where You Are Now

When was the last time you checked to see if the airbags in your car worked? Like many things, we just hope they work when we need them. The same is true for networks: They must work when we need them; therefore, a network assessment is the most important evaluation before implementing VoIP. In general, there are two types of network assessments:

- Pass/Fail "XO Communications advises, 'The first type of network assessment is relatively inexpensive and is typically a pass/fail where your service provider/partner can tell if the network can support VoIP traffic."
- Onsite Survey The purpose of this type of survey is to determine which specific components fail. For single-site solutions, the latter may not be important, but for multiple sites (where traffic will be traversing Session Initiation Protocol (SIP) trunks over a Wide Area Network), voice quality and support of functions (e.g., integrated voicemail) are vital.

As part of your network assessment, here is list of items that need to be considered:

#### **Network Checklist**

#### Age of Hardware

- Network servers You need to be using Microsoft Small Business Server 2003 or equivalent. Note: Have separate servers for business data and voice and other applications. Servers are relatively inexpensive, but any loss of service to your business won't be.
- PCs Recommend all be Microsoft XP running 512K RAM or higher.
- Wire/cable All inside cabling should be Category 5 Enhanced (CAT5E) or CAT6. You can't run VoIP on older voice cable. Better yet, install optical cable.
- Network Interface Cards (NICs) All devices should be running 100 Mbps, Fast Ethernet.

"Business-class VoIP providers, such as XO Communications, use a Virtual Private IP network to guarantee security and performance." ■ Local Area Network (LAN) switches — Should be 2004 or newer and Power over Ethernet (POE) to power the telephones. POE switches can also provide power for WiFi Access Points (APs), IP video cameras, security access, and other devices.

#### Bandwidth

■ Wide Area Network (WAN) or bandwidth – In most cases, there is not enough bandwidth for existing needs, so evaluate what additional bandwidth you may need to support a converged solution. Your service provider will perform this analysis.

#### Wireless Access

■ You need to use/install business class Access Points (APs), not ones designed for your home or cheap ones.

#### **Backup Systems**

- Uninterruptible Power Supply (UPS) Use battery backup on all servers and key administration PC.
- Software All current versions (including revisions) should be backedup on- and off-site.

#### Contact Lists

■ Keep a "who-to-call" for equipment and service at key locations on paper – not just on the PC.

The bottom line is: If you have a new LAN network installed within the past year, you are probably "good-to-go" for VoIP. If your LAN is older, then look at how old each element is and replace as needed. Be prepared to spend money on upgrading your LAN and WAN to make sure your business realizes the real benefits of VoIP.

#### **Ensuring the Highest Quality of Service**

Networks, especially business networks, are dynamic – more like the weather or road conditions – one minute everything is fine, and then it's a Category 5 hurricane. However, a trained professional will be able to review the checklist above and perform common network analysis stress tests. If your network is not very good today (e.g., downloads and/or sending files are slow), then it certainly won't be good enough for VoIP.

#### Optimizing Bandwidth for Performance

Optimizing bandwidth is the network equivalent of a "stress test" for your heart. Like the recent rise in the number of car safety crash tests, testing your network can determine how well it will function when all your users are on the phone and simultaneously accessing critical applications internally and externally. Like crash testing, you don't do it once; you do it often.

# Step 4: Identify the Right Partners/Providers

# Do Not Try This Alone

Some sage advice: Don't try to install VoIP yourself. Get help and then get a second opinion on the first opinion. If you are a do-it-yourselfer, jump on the search engines, such as Yahoo and Google, or call the local chamber of commerce, professional associations, or ask a friend. You need to build another checklist (this time for potential vendors) with issues that are important to you.

"Like the recent rise in the number of car safety crash tests, testing your network can determine how well it will function when all your users are on the phone and simultaneously accessing critical applications internally and externally. Like crash testing, you don't do it once; you do it often."

#### What's Needed?

At a minimum, you will need to select a VoIP service provider. Your service provider, such as XO Communications, provides connections to the Internet and Public Switched Telephone Network. In addition, your service provider may or may not provide equipment and other necessary offerings. Beyond your service provider, you may need to select vendors for wiring and a range of hardware and sofware related to your phone system and LAN. I recommend that you solicit proposals from no more than three vendors. Use the criteria below to help create a short list of vendors.

Here are some key items to include on your checklist:

# Creating a Short List: Service Provider Checklist

- Coverage Does the VoIP provider offer service and support for local and national coverage?
- Experience Does the provider have VoIP experience, a proven IP network, and a large base of satisfied customers?
- Product and Service Options Does the provider offer a broad set of business-class (not residential-grade) VoIP services and system options from which you can select?
- Online Feature Management Does the provider offer robust, webbased tools allowing you to easily self-administer voice features to save time and money?
- Creativity Is the provider willing to "think out of the box" for your needs?
- Desire Does the provider want your business?
- Consultative Approach Will the provider design a total solution that takes into account the needs of your business? The solution design should include a financial analysis, enabling you to compare beforeand-after costs and investment.
- Implementation Expertise Does the provider have qualified technical support specialists with expertise in LANs, cabling, telephone systems, power, and backup systems?
- Support What kind of support does the provider offer, and how much does it cost for upgrades, special billing, installation, maintenance, and customer care?

#### Going for a Demo and "Test Drive"

Some VoIP system providers carry a demo system with them to their appointments. Demonstrations help you understand how features work and phones operate. If the VoIP system provider can't come to you, then get out and see similar systems. Ask the buyers what they would have done differently. Remember, VoIP is not for every business. After a few "drive-by" visits to the dealer's operation, if you don't like what you see, consider another service provider.

# Experience Is Key

Understanding the menu of available VoIP features is one thing, but understanding the implications of features on your business is another. The ability to match VoIP features to your business needs and objectives is where an experienced telephone service provider or consultant can be of most help.

"Beyond your service provider, you may need to select vendors for wiring and a range of hardware and sofware related to your phone system and LAN. I recommend that you solicit proposals from no more than three vendors."

# Step 5: Design the Solution

You can use the information outlined in "Step 2: How VoIP Works" and "Step 3: Assess Your Network Situation" to understand the issues involved in designing the solution. Below are some key considerations.

# Types of VoIP Services

The type of VoIP service you select will determine how complex your implementation will be. In general, there are four types of VoIP implementations available to business:

■ Integrated Access (e.g., IP Flex) is an ideal entry-level VoIP service that will enable you to reap most of the major benefits of VoIP. This is the easiest VoIP service to implement because it allows you to keep your existing phone system while combining voice and data traffic on a single connection. See Figure 1.

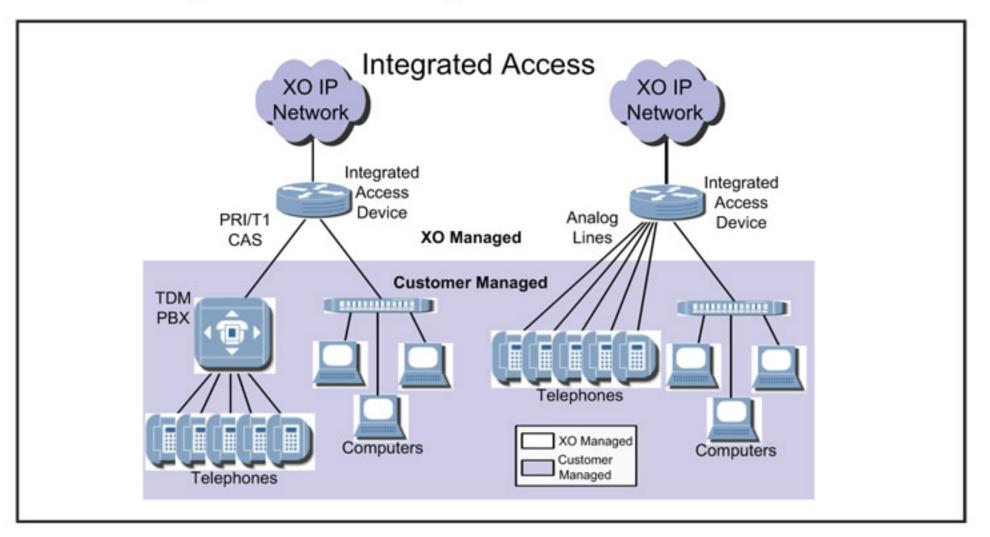


Figure 1 - In both scenarios, the business can use its existing telephone equipment with a VoIP Integrated Access solution from XO. Outsourcing level: Med.

■ SIP Trunks – This VoIP service is for users who plan to purchase and manage their own IP-based phone equipment. SIP is a set of signaling protocols used to connect IP-PBX systems via IP networks, commonly referred to as SIP trunking. SIP trunking is used by small or large businesses to interconnect branches or field offices. See Figure 2.

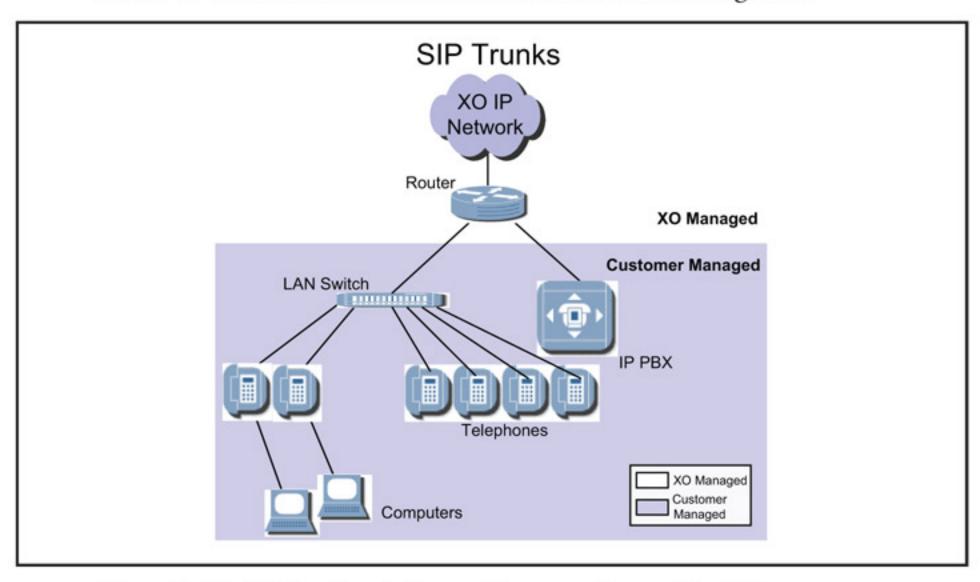


Figure 2 - The SIP Trunks solution enables an end-to-end IP solution across one or more company sites for businesses that purchase and manage their own IP PBX. In some cases, the router and PBX are combined as one. Outsourcing level: Med.

"The ability to match VoIP features to your business needs and objectives is where an experienced telephone service provider or consultant can be of most help."

■ Managed IP PBX – This service option is ideal for companies ready to replace their phone system and PBX but either want to avoid the capital investment and/or don't have the expertise to support and manage the equipment themselves. For a monthly fee, the service provider provides the service and equipment, manages the service, and maintains the system. See Figure 3.

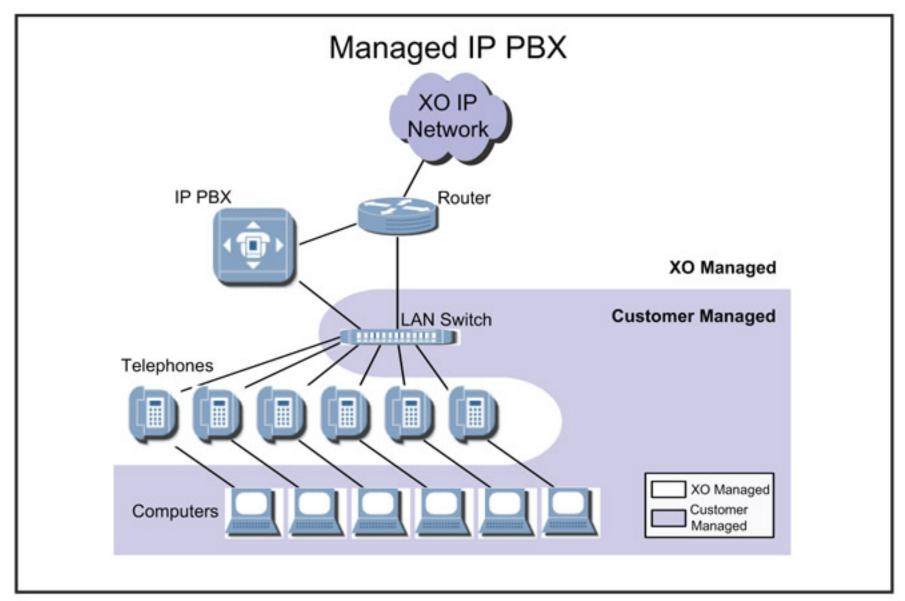


Figure 3 - With Managed IP PBX, the Service Provider manages and maintains all facets of service, phones and PBX, which reside on customer premises. Outsourcing level: High.

■ Hosted IP PBX – This service is for businesses seeking the benefits of using IP phones and an IP-enabled PBX without having to buy and manage a PBX. Instead, the functions normally associated with an IP PBX are "hosted" in the service provider's network and accessible by the customer through an Internet portal. When considering this type of solution, you will still have to invest in a LAN upgrade and typically pay a higher cost per user than other solutions. See Figure 4.

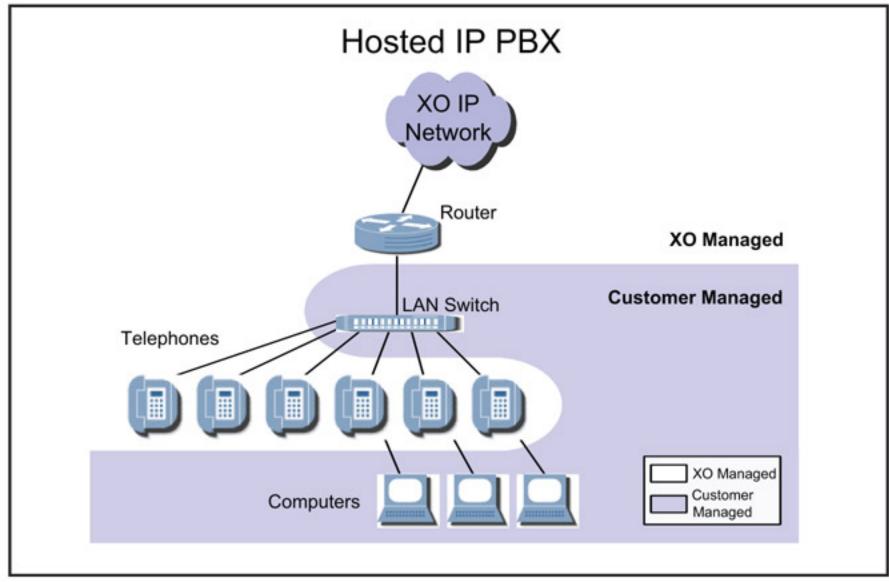


Figure 4 - With a Hosted PBX solution, all IP functionality is "hosted" in the Service Provider's network. There is no need for a PBX, and the Service Provider also manages phones. Outsourcing level: High.

While VoIP services require a minimal level of customer network performance, you don't need to "rip and replace" your entire investment. Your network support personnel, equipment vendors and service providers, such as XO

"While VoIP services require a minimal level of customer network performance, you don't need to 'rip and replace' your entire investment. Your network support personnel, equipment vendors and service providers, such as XO Communications, can help you evaluate and recommend solutions that fit your network and budget."

Communications, can help you evaluate and recommend solutions that fit your network and budget.

# Conduit and Cabling

With VoIP, going from A to B is more like A to E; there are a few more steps along the path. Check with the building owner/manager to make sure there is enough unused conduit (pipe) between floors and on the same floor to support current and future LAN requirements. Cabling is often not included in the cost of the new system. In addition, VoIP systems require (at a minimum) higher speed cabling called "Category 5 Enhanced" (CAT5E). You may already have CAT5 for your data network. If not, a move to VoIP is often a good time to upgrade your data cabling to be compatible with gigabit Ethernet, such as CAT6, which is also available now.

#### **External Connections**

Regarding your external connections or WAN, plan on using an Integrated Access Service (IAS a.k.a., Convererged Service) from your telephone service provider (XO Communications calls it IP Flex), which gives your phone calls priority when they need it. And, when the phones are not being used, the network can be used full-speed for your data needs. This is because data usage needs continuously fluctuate.

Rather than assign fixed capacity for traditional voice and data traffic, IP Flex adjusts to heavy data demands by permitting the full use of the IP circuit to support data traffic when voice lines are idle. However, voice traffic will always have priroity, so businesses get maximum use and value from their integrated access circuit while ensuring the highest quality of service for voice calls. It reduces the time needed to exchange large files while delaying (or perhaps eliminating) the purchase of additional bandwidth.

Getting help from an experienced provider/partner can guide you through the complexity of determining how many telephone lines and how much bandwidth are needed for your business.

# **Making Changes**

With VoIP, assigning features is the job of the office manager or IT tech. They can add or delete users and change features easily (point and click) with a web browser. When it comes to adding features, make sure that your service provider can supply them in a cost-effective manner.

Here are some suggestions for your checklist:

# Checklist for Designing a Solution

- Type of VoIP Will the provider help you determine what type of VoIP system/solution best meets your present and future business needs? Is the solution optimized to support your telephony and data network operating environment?
- Conduit and Cabling Do you have sufficient conduit to support current and future LAN requirements? Do you need to upgrade your data cabling to CAT6?
- External Connections Does the provider offer a dynamic, integrated IP solution for voice and data that meets your performance/quality needs and geographical needs? Is the solution scalable to meet current and future business needs?
- Changes How easily and cost effectively can changes be made to your VoIP services?

"Getting help from an experienced provider/partner can guide you through the complexity of determining how many telephone lines and how much bandwidth are needed for your business."

# Step 6: Select a Proposal

# **Evaluating Proposals**

When it comes to selecting a proposal, there is often no easy winner. However, cost isn't everything; don't always select the lowest bidder. An evaluation checklist, or bidder's proposal, can be helpful in choosing vendors. This proposal checklist should consist of the following:

# **Proposal Checklist**

- Depth of Services Does the proposal offer an array of network services and VoIP solutions with features your business requires?
- User Evaluation Does the proposal include user needs assessment?
- *TCO* Does the proposal provide a total cost of ownership analysis? If not, has the provider done a before-and-after cost analysis? For further information on TCO, refer to "Making the Move to VoIP: Total Cost of Ownership for Small Business" at http://www.xo.com/learnvoip.
- References Does the vendor provide references?
- Installation Scheduling Does the installation schedule meet your needs?
- Financial Does the proposal include flexible financing options that protect your investment?
- Performance Penalties Does the proposal include a service level agreement with performance penalties if what's promised isn't delivered?
- *Training* Does the proposal include user training? If you need training at a later date, is there a fee?
- Cost Does the proposal provide a detailed cost breakdown? Any hidden fees?
- Support What does the vendor charge for one-hour, same-day, and next-day service?
- Future Growth Does the proposal offer flexibility to accommodate growth and other changes in your business?
- *Warranty* Does the proposal include a warranty?

#### Making an Informed Decision

Exercise great care in your deliberations, as you will have to live with the consequences for quite a long time. If you are rushed because of rapid expansion or lease ending, then get help from references or your provider. In other words, you make decisions on telecommunications very rarely, so get help. A good question to ask a reference is, "What would you do differently if you had to do it over again?"

To help with decision-making, you could use the checklist above to develop a list of evaluation criteria or "decision matrix" and put a value or weight to each one. Then when you get proposals, you can "score" each one on the criteria and weight. You should then end up with the best choice (or choices, if you are selecting more than one vendor).

"When it comes to selecting a proposal, there is often no easy winner. However, cost isn't everything; don't always select the lowest bidder."

# Step 7: Install and Test

# Making a List and Checking It Twice

What's the best time for VoIP cutover? Contrary to what you may have done in the past, my recommendation is to schedule the cutover during the day (when telephone and networking companies are fully staffed) to work through any issues that may come up. Of course, every precaution needs to be made to minimize operational disruption to your business. For this reason, try to pick a "slow day" in the event a service outage were to occur during the cutover. Ask your installation team about the likelihood of outages and what to expect for a smooth "flashcut"— so there are no surprises.

Changing services frequently requires actions on several fronts to ensure a smooth installation. For example, existing equipment (e.g., fax machines, credit card readers, routers, etc.) may need new settings and programming. It's important to identify these actions and determine who is responsible for each.

Your installation and testing checklist should include the following items:

# Installation and Testing Checklist Programming

- Telephone Numbers Who will program all telephone numbers?
- Features –Who will program all the VoIP features you requested?
- *Voicemail* Who will program voicemail?

#### **Testing**

- Phone Testing Will the phones be tested for internal, local, and long distance access? How and when will issues be resolved?
- *Quality Testing* Will the lines be tested for voice and data quality? How and when will issues be resolved?
- Stress Testing Will the equipment hold up under stress? Will the vendor get as many people as possible to try to break it? How and when will issues be resolved?
- Performance Testing Will the provider use performance-testing software to continuously monitor your network to see problems as they arise (or long before they arise)?

#### Cutover Process and Installation Team

- Scheduling Will the installation be done during business hours, on weekends, or during non-business hours?
- Outages During Installation What is the likelihood of outages during cutover? What will be done to minimize their occurrence if scheduled during business hours?
- Local vs. Remote Installation Support How much of the installation will be supported by onsite field techs? How much will be supported by remote personnel operating from network operating centers via remote access?
- Installer Expertise Will the installers have the necessary expertise to address all facets of the installation process?

What else should you include on your installation and testing checklist? Check with your service provider, but this is a good start.

"What's the best time for VoIP cutover? Contrary to what you may have done in the past, my recommendation is to schedule the cutover during the day (when telephone and networking companies are fully staffed) to work through any issues that may come up."

# **Step 8: Manage Service and Support**

#### **Training**

VoIP is not new, but there are new features that make it a better business decision every day. Will your users know how to use these new features? One VoIP consultant has said, "No training means no touchdown," so the better trained the user, the better their understanding of the benefits to them and to your business. Training, which is paramount but often overlooked, empowers users for significant productivity gains. And, as one dealer said, "There is a 1-to-1 relationship between user satisfaction and the amount of training." With VoIP, online tools can provide "visual" training anytime the user needs to know. The good news is there are no more long lists of commands to remember or buttons to press on the phone; it's all done on the screen – faster and more flexibly.

# Support Issues and Response Times

Just as your car has airbags, so should your business have a backup plan. Make sure that if there is a failure, your calls are automatically forwarded to key cell phones or an externally available voice mailbox. Next, test to see if it works. The backup plan should be part of your overall disaster preparation program for your business.

During your "test drives," you probably asked other customers what their experience has been. If the "car is in the shop" a lot of the time, then adjust your thinking and budget accordingly. Even if there is only an occasional outage, you still need a plan.

#### **Understand What's Different**

While VoIP services provide many of the same features (and more) compared to traditional phone service, there are things about VoIP that are different. For example, as an IP service, VoIP is not location specific so it's important that your service provider has the correct physical address for things like E911 response. And, because VoIP runs on the same network as your data, it requires electricity to run. Therefore, smart VoIP installations will have battery backup systems and/or alternative communication options, including an analog phone line or cellular service.

# Training and Support Checklist

Start your plan for managing change with the following items:

- Training Delivery Will your VoIP vendor provide user training? Online training tools?
- Backup Plan If your phone service fails, will your calls be forwarded automatically to key cell phones? To a voice mailbox?
- Outages What accommodations will your vendor make in the event of unacceptable outages?

#### Clarify Service Expectations

Rarely do organizations remain the same. They grow, shrink, move, and respond to business conditions. Being ready for change is having a plan. Having a plan includes setting expectations as to what level of service you must have and want to have. To clarify your service expectations, find out what the vendor's customers have to say about their sales, billing, technical support, and service in general.

"Training, which is paramount but often overlooked, empowers users for significant productivity gains. And, as one dealer said, 'There is a 1-to-1 relationship between user satisfaction and the amount of training."

"To clarify your service expectations, find out what the vendor's customers have to say about their sales, billing, technical support, and service in general."

# **Step 9: Understand Your Bill**

Wouldn't it be nice if a vendor gave you the bill in the format you wanted? If your staff takes hours to understand what various charges, moves, and fees mean, you may be paying too much. Simply put, you could be "paying a lot for paying the bill."

In selecting a vendor, consider the following billing questions:

# Billing Checklist

- Invoices Will all your phone services be listed on one bill?
- Online Access Will the vendor provide convenient online access to billing history and usage data? Will you be able to pay bills online or "autopay"?
- Assistance Will the vendor explain the first bill to you? Provide assistance thereafter?
- Corrections How hard is it to get an error on a bill corrected and a refund issued?

# **Step 10: Consider Future Options**

## Multimedia Conferencing

Many experts suggest that VoIP will change the way we do business. From my own research, it will indeed change the way we do business. Instead of wasting time in endless meetings only to have another meeting, VoIP allows the kind of conference calling that was conceived when voice conferencing was invented – where voice, data, and video are all on the PC or other user device.

What's taken technology convergence so long? It wasn't that the pieces weren't there; they were always separate from one another. Moreover, the way people ran their businesses was based on this "separate" approach to technology. Voice was separate from the data network not because the technology wouldn't work, but because you bought your voice from a different company than your data networking. No more. You can now have serious discussions with a provider, such as XO Communications, who has invested heavily in current operations and is making substantial investments in new and innovative "IP-Internet Potentials" services.

Here's a final question for your checklist: Does your VoIP provider have an evolutionary product path in place to ensure an easy transition to a more sophisticated or larger system as the technology changes and your business grows? The "unification" of technology providers is as important as the technology itself.

# **Summary: What Every Business Should Know**

If you are the type of reader who opens the book from the back, here goes:

- VoIP is here to stay get over going back.
- VoIP changes the way people work people love it.
- VoIP brings about a new business model but not for every business.
- VoIP doesn't cost less for voice but the Total Cost of Ownership is less.
- VoIP is actually pretty "hot" technology.
- Implementing and managing VoIP is easy if you plan for it.

If you read just the summary and like what you read, then go back and read the whole thing because there are some critical details you need to understand before you rush out and buy VoIP today.

#### **About XO Communications**

XO Communications is a leading nationwide provider of advanced broadband communications services and solutions for businesses, enterprises, government, carriers and service providers. Its customers include more than half of the Fortune 500, in addition to leading cable companies, carriers, content providers, and mobile network operators. Utilizing its unique combination of high-capacity nationwide and metro networks and broadband wireless capabilities, XO Communications offers customers a broad range of managed voice, data and IP services with proven performance, scalability and value in more than 85 metropolitan markets across the United States. For more information, visit www.xo.com.

For more information about XO VoIP services, please visit http://www.xo.com/services/voip/ Pages/overview.aspx.

#### About TECHtionary.com

TECHtionary.com produces dealer and customer training programs, online presentation, including iPod and PC format sales brochures, virtual installation manuals, and animated online presentations. The company has more than 2,850+ online presentations on data communications, Internet, wireless, VoIP-Voice over Internet Protocol, PBX systems, central office switching, protocols, telephony, telecommunications, networking, routing, IPTV, WiMax, power systems, broadband, WiFi-wireless fidelity, and other related technologies available at http://www.techtionary.com. Thomas Cross is a magazine columnist with many key technology publications and a member of the Technical Board of Advisors for the VoIP-Security Alliance.

January 2007

© Copyright 2012. XO Communications, LLC. All rights reserved. XO, the XO design logo, and all related marks are trademarks of XO Communications, LLC.

# The Ten Steps at a Glance

- 1. Identify User Needs
- 2. Understand How VoIP Works
- 3. Assess Your Network Situation
- 4. Identify the Right Partners/Providers
- 5. Design the Solution
- 6. Select a Proposal
- 7. Install and Test
- 8. Manage Service and Support
- 9. Understand Your Bill
- 10. Consider Future Options