

AN APPROACH TO ENTERPRISE VoIP READINESS AND ROI ASSESSMENT

***A Practical Guide to the IT Executive
Considering the Use of Enabling
Technology***

Based on the enterprise experiences and subject matter expertise of the people from



PURPOSE

The purpose of this paper is to provide the enterprise IT operating executive with a pragmatic and phased approach to considering the application of VoIP, the potential benefits, risks, issues, and the return on investment (ROI), if any.

In addition, this paper lists a 4-step process that will identify high-level indicators that may support a VoIP implementation, or totally rule out VoIP value to the enterprise, or recommend further analysis.

BACKGROUND

Voice of Internet Protocol (VoIP) is a proven and powerful technology that is enabling many new uses of voice communications. Many businesses are deriving a new range of functional and management benefits from VoIP today. While the total cost of ownership of VoIP implementations may be lower than the previous telephony system, cost savings is not the primary driver for most VoIP implementations.

4-STEPS TO VoIP INSIGHT AT YOUR ENTERPRISE

As part of any evaluation to implement VoIP in your enterprise, our experience indicates that this 4-step process will gather the information and create the analysis needed to help determine the likely impact of VoIP at your company.

1) FULLY UNDERSTAND HOW YOUR ENTERPRISE USES TELEPHONY

While this appears as a simple question at first, try answering these questions:

- What percentage of phone calls originated by employees go to other employees at company offices?

- What percentage of phone calls go from employees to other employees on company mobile phones?
- Does your company use Call Centers? Are Call Centers of strategic importance or a market differentiator to your business? If so, are your call centers operating as best-in-class?
- What percentage of outbound employee calls have migrated from your office phone system to mobile phones in the last 5 years? Where will this go in the next 5 years?
- What percentage of your employees operate more than 25% of their work-time outside the office? What is the trend?
- How many Moves, Adds, Changes of phone hand-sets has your company made in the last 12 months? What is the future trend?
- Is there interest in better integrating business information and accessibility of business data with the telephone (Multi-media contact centers utilizing voice calls, emails, web interactions, faxes and video)?

Understanding how your enterprise uses telephony is the first critical step in determining if VoIP can create any benefit in daily use, but it is still too early to determine if VoIP is right for you.

2) CREATE A BASELINE OF YOUR CURRENT TELECOMMUNICATIONS EQUIPMENT, NETWORK SERVICES, STAFF AND OTHER OPERATING COSTS

Understanding your current telecommunications operations that support the use of telephony at your enterprise is critical in making future decisions about VoIP.

For example, understanding how much your telecommunications system costs is important to determine

where VoIP may be utilized to lower operating costs. With a recent client, we determined that the 20+ year PBX annual maintenance costs was higher than the 5-year lease on a new VoIP system. The client was able to cost-justify the new technology in maintenance cost reductions, and get material functional improvements in their operations. Typically, the conclusion is not that clear.

We recommend that you create a high-level analysis similar the following table:

EQUIPMENT	Location A	Location B		Location Z
Current PBX	Model, Lease/Purchase, Maintenance			
Current Voicemail	Model, Lease/Purchase, Maintenance			
Call Center or CTI Platform	Model, Lease/Purchase, Performance Metrics			
STAFF	Location A	Location B		Location Z
Mgt				
Technical				
Admin				
SUPPORT	Location A	Location B		Location Z
MACD				
Feature Requests				
TOTAL				
TELECOM SERVICES	SERVICE PROVIDER	MRC	ARC	Remaining Term
Local Voice	ABC	\$	\$	12 months
Long Distance	XYZ	\$	\$	8 months
Frame or WAN	123	\$	\$	6 months
Internet	XYZ	\$	\$	18 months
Wireless	ABC	\$	\$	None
TOTAL		\$	\$	

- MRC is Monthly Recurring Charge
- ARC is Annual Recurring Charge = 12x MRC

In this exercise, you are trying to create a high-level snapshot of telecommunications costs for the enterprise, and you may not have all the details readily available, and you may need to make some estimates. That is OK at this high-level.

3) UNDERSTAND THE FUNCTIONAL, MANAGEMENT AND COSTS BENEFITS OF VoIP; UNDERSTAND THE NETWORK REQUIREMENTS OF VoIP (including virtual LANs, power over ethernet, capacity, quality of service, security)

Now that you have a clear picture of how your enterprise uses telephony and the resources and costs associated with provided those telephony services, you should seek out know-how on VoIP. You have several sources from a wide range of books, journals, vendors, colleagues and consultants.

Based on our experience, most VoIP systems provide quality call processing, centralized administration and reporting, voice-mail and/or unified messaging, and a range of new features that may or may not be valuable to your and your employees. Most analysts agree that the top VoIP systems provide close to 100% of the features of the most robust traditional PBXs, and go several steps further.

VoIP has moved well beyond the early adopter stage, evidenced by IP Voice deployments surpassing TDM deployments on a global scale, and large deployments (in excess of 150,000 phones) becoming commonplace. Because of the ability of VoIP to offer business data integration with voice services, the call center has proven to be a common entry point for VoIP implementations.

Typically, one immediate area of cost-benefit with a VoIP system with IP hand-sets or soft-phones is in the reduction

of MACD costs. IP handsets require little to no re-programming to migrate in the current enterprise network domain – simply find an active IP port, and plug in.

With VoIP, new business capabilities are possible that may play directly into your strategic plans. Business information stored in databases, and business processes that include communications and information in the workflow, can potentially be accelerated by integrating that data into voice communications. Data dips through speech recognition, rich CTI to present relevant information during conversation, and presence-based messaging offer productivity enhancements to business processes.

You must also seek to understand the network requirements for operating a VoIP system. With VoIP, telephony is now an application on your network, and you will need to plan for its operation, network utilization and security to mention a few key areas. In this exercise, you should ask these questions:

- Do your current ethernet switches support VLANs?
- Do you current ethernet switches have or support Power of Ethernet?
- Does you LAN/WAN have enough capacity to support telephony? (you will need to have some approximate knowledge of call volume for your enterprise)
- Does your LAN/WAN support Quality of Service? (most enterprise elect to use QoS to prioritize voice traffic ahead of email, web browsing or other network applications)

Answers to these questions are critical in determining what, if any, modifications or upgrades are required to your network infrastructure to provide a quality VoIP experience for your enterprise.

- 4) ALIGN THE OUTPUT OF 1 AND 2 WITH 3 TO DETERMINE IF VoIP CREATES ANY FUNCTIONAL, MANAGEMENT AND/OR COST BENEFITS; QUANTIFY AND RANK THE BENEFITS

The last step is the hardest and typically requires VoIP experience in the form of a person or team that has performed this analysis, and planned and implemented multi-vendor VoIP systems.

In our experience, this 4-step process usually yields a result in one of three cases:

- A) INDICATORS ARE HIGH THAT A CLEAR AND IMMEDIATE FUNCTIONAL BENEFIT AND ROI ARE AVAILABLE TO THE ENTERPRISE WITH A VoIP SYSTEM.

A number of examples of this situation exist:

- *Your company head-quarters are moving to a new location in 12 months, and your current PBX/voice-mail is over 15 years old. The cost of moving the current system, the service outage during the move, and lost improvement in functionality is more than the cost of acquiring a new VoIP system.*
- *Your company is opening new offices to accommodate growth, and you elect to establish a new VoIP standard system instead of continued investment in traditional PBX systems.*
- *Your existing PBX and/or voice-mail are at "end of life" and no longer supported. System maintenance costs increase and spare part availability is questionable. You need to plan a migration to the next-generation system, and the maintenance costs alone may cost-justify the upgrade.*

- *Your 10+ year old call center platform does not support CTI and remote workers. You create a functional impact ROI that justifies the implementation of a VoIP system and IP Contact Center system.*

B) INDICATORS ARE HIGH THAT THE ENTERPRISE SHOULD CONTINUE TO UTILIZE ITS CURRENT TELEPHONY SYSTEMS, AND RE-EVALUATE WHEN CERTAIN CONDITION CHANGE.

- *Your existing, basic use of telephony and relatively new traditional PBX systems indicates that you should continue to operate those platforms for the next 3 to 5 years.*
- *Your current telephony usage, local campus operations, and preference to limit telecommunications management staff indicate that you should continue to leverage your investment in Centrex services and outsourced telecommunications management.*

C) YOU ARE IN THE GRAY AREA. WHILE FUNCTIONAL BENEFIT IS APPARENT, THE ROI IS LONGER THAN THREE YEARS AND THE BUSINESS CASE DOES NOT MAKE THE CUT. MORE RESEARCH AND ANALYSIS IS REQUIRED.

- *Your use of telephony and increasing changes to your mobile work-force indicate that VoIP value is high, yet the enterprise invested in new traditional PBXs less than three year ago. You should look closer at key functional benefits and determine if a phased or "hybrid" approach to VoIP is beneficial. Certain traditional PBX vendors offer VoIP appliance or cards that fit in the current TDM backplane and offer some of the functionality of a full-featured VoIP system.*

Whatever your particular situation, VoIP is the contemporary trend and you should have a plan for the optimal approach to introducing and leveraging this key business enabler.