

Business VoIP: An End-User's Perspective - May 2003

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Executive Summary

Voice-over-IP (VoIP) enables real-time transmission of voice communication, as packetized data, over an IP network. VoIP encompasses a wide range of applications, such as voice features found on common Instant Messaging software or IP Telephony.

IP Telephony uses VoIP technology to emulate the traditional voice network over an IP network. All IP Telephony calls are VoIP, but not all VoIP communications are IP Telephony. IP Telephony has the same functionality as the Public Switched Telephone Network (PSTN). It uses the same number of dialing features as the PSTN, and allows for communications between users on different networks. IP Telephony should also interact with the PSTN.

Both VoIP and IP Telephony are finding their way into the business environment. In fact, many businesses have been making VoIP calls for years without knowing it. The International wholesale VoIP market has been around since the late 90's. The International wholesale VoIP market completes calls for many of the major US carriers, looking for lower rates to foreign countries. Now these same carriers are also adding VoIP to the own domestic networks as well. What is really changing this market is the fact that VoIP is starting to work its way down to the end-user.

With the improvements in VoIP technology, and the growth of IP Telephony solutions, business are starting to consider IP Telephony as part of their corporate communications package. The primary drivers for IP Telephony are cost savings.

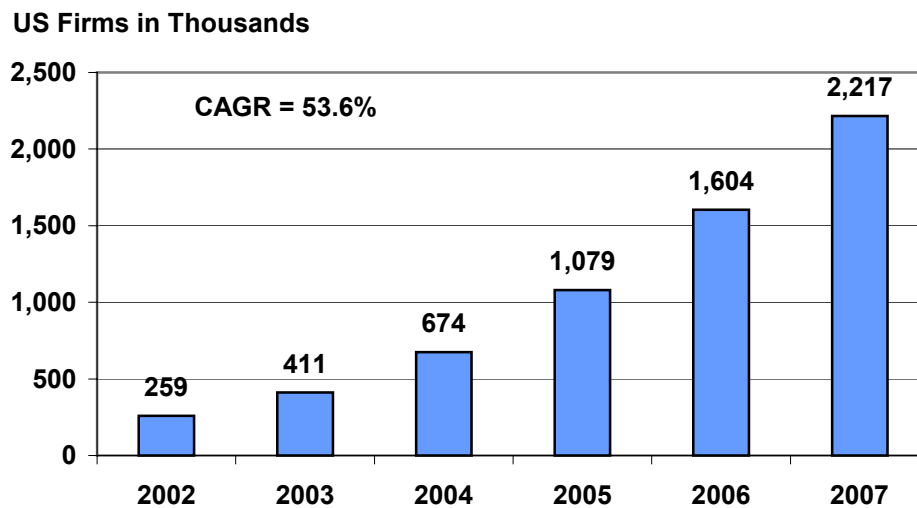
Cost savings come in several forms. IP Telephony per-minute rates are typically lower than per-minute phone rates. IP Telephony allows for Wide Area Network (WAN) savings in that business can use the same network for both their voice and data needs. More savings come in the form of staff reduction because IP Telephony allows for the combining of job functions for the Telecom and IT staffs.

Based on In-Stat/MDR's survey of its Technology Adoption Panel (TAP), we estimate that, at the end of 2002, close to 260k US firms were using some sort of IP Telephony. This is roughly 2% of all US firms. In-Stat/MDR also forecasts

that this will grow to over 2.2 million US firms by 2007, or 19% of all firms. For the firms using IP Telephony, it is important to understand that not all of them will totally remove their old voice system.

Many, while deploying an IP Telephony solution, will also continue to use their traditional voice solution as well. In some cases business will only deploy the IP Telephony solution at specific sites, either to experiment with the technology, or because it best fits the voice traffic coming from that site. Figure 1 shows the number of US firms with an IP Telephony solution.

Figure 1. US Firms with IP Telephony



Source: In-Stat/MDR, 07/03

Firms looking to deploy an IP Telephony solution have three ways of doing it. They can totally outsource it to a service provider, do it totally in-house, or deploy a combination of the two. Currently, the most common method of deploying an IP Telephony solution is in-house. Furthermore, those businesses looking to deploy an IP Telephony solution in the near future are also showing a preference towards an in-house solution, versus the alternatives. Even with an in-house solution, there is room for the service provider. Service providers can sell these firms an access service that prioritizes voice traffic over less time-sensitive data traffic.