Why Convergence?

Companies and organizations all over the world are rapidly migrating from traditional systems, such as PBXs and video conferencing based on ISDN, to systems that use a fundamentally different architecture under which voice, data, video, and fax are all converged on a single platform and a single, Internet Protocol network.

Converged systems have been available for only a few years but already account for a majority of all spending on business communications systems. Leading manufacturers have all but discontinued production of traditional systems.

Why are businesses moving to convergence so rapidly? According to a survey conducted by Sage Research, the two reasons most often cited are cost savings and productivity gains. Although most buyers face on purchase prices, the initial cost of a traditional telephone system, for example, is only about half of the total cost of ownership (TCO). Thus, the TCO for a $25,000 system could easily be $50,000 over the full life cycle of the equipment.
Initial Installation Costs

Whether building a new facility or building out leased space, two infrastructures must be installed with a traditional system – one for voice and the other for data (the LAN). Convergence makes it necessary to install only the infrastructure associated with the LAN, which can amount to thousands of dollars in savings. Furthermore, companies using converged communications systems at remote locations are saving up to four weeks in the time it takes to open new offices.

Moves, Adds, and Changes

Moves, adds, and changes require costly service calls to physically relocate instruments and modify system software. Telephone equipment dealers, for example, will typically charge for four hours of travel and labor to add or relocate an instrument and reprogram system software.

According to the Sage Research study, the single most frequently reported benefit of a converged system is the ease of workspace relocation. Almost 75% of the survey respondents reported that their businesses realized substantial benefits from faster moves, adds, or changes.

With converged systems, there is no cost to move a phone. Moving the phone is the same as moving a laptop computer. Users unplug the phone from one location and plug it in again anywhere on the network, without any action from an administrator. Adds and changes are accomplished with a few keystrokes.

Expansion

As your business grows, you need to add capacity to your TDM system. In addition to more telephones, this often requires cards to add capacity to the PBX, and the labor costs to install the expansion boards and terminate wire terminations in the PBX. And if your growth exceeds the maximum capacity of the chassis, the cost of adding additional switching and control units (or perhaps replacing the old system altogether) could easily run into tens of thousands of dollars.

With converged systems, you can grow from 5 to 250 users without adding any more circuit cards. Adding new employees is as simple as purchasing additional phones and software licenses. Also, with most converged platforms, it possible to expand a system at a single site to include multiple sites located worldwide but all with a single, seamless interface.

System Enhancements

Similarly, the cost of adding major enhancements like unified messaging, call center functionality, or integrated voice response (IVR) to a traditional voice system to a PBX could easily exceed the original cost of the entire system.

Traditional systems use proprietary architectures. Adding equipment or software from third parties requires costly integration. As a practical matter, businesses are virtually forced to purchase enhancements from the same company that made the switching system. Imagine what applications software and printers would cost today if you could only buy them from the original vendor?

With the growing acceptance of interoperability protocols, businesses can expect to see a rapid growth in third party applications, many specific to your industry. This is exactly what happened in the computer world with the de facto standardization of operating systems. The savings convergence will bring will depend on the application, but savings in installation costs alone could cut 15 to 20 percent off the cost of the enhancement. Over time, competition from third party software companies will continue to drive down the cost of add-on tools and system enhancements.

Centralized Administration

Converged communications systems do not require PBX units at each branch of a multi-location business. Everything is controlled and administered from one central point with a user interface that can be accessed from virtually anywhere.

Employees can call colleagues at other locations by dialing an internal extension, just as if they were sitting across the hall. Site visits to correct minor problems or to add or remove system features are all but eliminated.

Reduced Toll Costs

Although toll costs have dropped dramatically in recent years, long distance charges are still a significant expense. The average business spends about $5,000 a year on long distance. If we consider only mid-size businesses, the annual cost grows to $25,000 a year or more, and millions for very large organizations).

With IP-based systems, voice traverses the WAN or the Internet. Like surfing the web, there is no incremental cost. For businesses that are already paying for high-speed private networks, adding voice and video means more efficient utilization of network facilities. The savings can be substantial, particularly for intrastate calls, which remain regulated. If IP telephony reduced toll costs by only 20 percent the investment could easily pay for itself in toll savings alone.

Soft Benefits

In addition to these hard savings from the IP architecture, most businesses find that the more important benefits to them are that their businesses simply run more efficiently and productively.

One of the main benefits of convergence is that both voice and data can be delivered real-time to a multitude of wired and wireless communications devices. Presence technologies inform message originators of both the availability and optimum communications mode for reaching people now—and these technologies are seamlessly integrated with the phone system. Intelligent routing features automatically redirect calls and messages to the number or device where you can be reached.

Consider how much time is lost and business opportunities are missed simply because key employees can't communicate in real time. An oft-quoted statistic (attributed to AT&T) is that only 10% of business calls is completed to the intended party on the first attempt.

One reason is that office workers simply are not always in their offices. A study by Steelcase showed that office workers are at their desk only 50% of the time. When decisions need to be made quickly, trading voicemails and emails is a poor substitute for live human discourse.

The Sage Research survey reported that fully half of the participating businesses experienced less phone tag after their IP telephony implementations. Most participants saw this as making their businesses more competitive.

Although it is difficult to quantify, making better decisions faster means productivity improvement. Ultimately, that is what convergence can bring to the company or organization that adopts it.