Bridging
The Future:
Innovations and Value in Teleconferencing Technology and Applications

April 25, 2006
OVERVIEW

Teleconferencing technology is the most practical solution for maintaining an on-going dialog between vendors and customers, departments and teams. Like any point-to-point call, teleconferencing must be easy to accomplish from anywhere, by anyone, at any time, as simple as picking up the nearest telephone.

If you have used a telephone over the last twelve months you know that the types of devices we make calls with are rapidly evolving: internet calling, PDAs, On-Star, wireless and wearable phones. Teleconferencing lets you connect with anyone instantly, using any telephone device.

This new era in audio conferencing is booming, because immediacy and accuracy have become even more important to every aspect of critical business dialog.

Teleconferencing FAQs

What is audio conferencing?
Also called phone conferencing or teleconferencing, this is a service that allows a number of people to be linked together through a telephone call wherever geographically scattered they are. The people involved in the conference can hear each other and respond interactively.

Why audio conferencing?
This helps companies gain timely information in real time, bringing people and ideas together rapidly without any boundaries, facilitating fast decisions and increasing productivity. Virtual conference calls eliminate delays, unnecessary travel costs and downtime when employees have to travel for meetings.

How is it done?
Audio conferencing to an end user is as easy as picking up a telephone and dialing a number and providing a “PIN,” which is just a pass code. The conferencing service provider (whether a service bureau or internal IT network) provides the necessary equipment that is connected to the telephone network and internet or IP networks.

Who benefits from it?
Organizations of all types and sizes see the benefits of incorporating audio conferencing into corporate communications processes. It is the easiest and most cost effective way to communicate and collaborate among employees, customers, suppliers and partners, faculty and students, doctors and patients.

Conferencing Comes of Age

Audio conferencing continues to gain ground as a critical component of business process and daily operations. Choosing a platform that provides the best options and maximum value offers numerous advantages.

In earlier days, most teleconferencing service providers used monolithic, audio conferencing systems that were TDM based circuit switched connections. IP and VoIP-based packet switching are earning more attention and market share, opening a new level of options for CTOs.

During this transition, TDM-based conferencing, IP-based audio conferencing, and hybrid conferencing systems (both TDM and IP network options) are available as valuable options. Being able to select a hybrid teleconferencing bridge that supports both networks is a wise investment decision.

The most obvious advantage is the ability to connect both legacy TDM, as well as IP flexibility into the same network environment.

Hybrid conferencing bridges can be remotely controlled with operators sitting across the world, accessing the conference bridge through the web and IP phones. These teleconferencing bridges support geographically dispersed participants, and allow the option of IP soft phones to connect in the same conference as easily as those who dial in over the PSTN.

Streaming teleconferencing in real time is easy to execute. Faster and more accurate processors assure consistent, superior clarification even with dozens and dozens of callers in one large call. Instant record/playback gives easy accessibility to the listen only audience who can download a meeting through the web, providing the value of expanded reach without additional resources or costs.
Conferencing Helps Everyone!

Sales: Increase revenue and leverage resources by delivering presentations remotely to more prospects. Identify target segments and implement educational webinars. Bring all influencers and decision-makers into a virtual meeting to close sales sooner. Identify, isolate and resolve customer issues with team conference call; increase customer satisfaction, loyalty and referrals. Train and educate customers and partners.

Executives: Communicate new programs and policies to global employees swiftly and efficiently. Provides a cost effective medium for regional product and campaign roll-outs. Support market tests to gain valuable insight and feedback. Mediate and negotiate settlements and contracts remotely via voice or web conferencing. Raise the bar on internal communication and accountability with daily/weekly team calls; stay connected with road warriors and telecommuters.

Manufacturing: Brainstorm on designs and manufacturing plans to get products to market faster. Connect production locations and assembly stages for improved safety and efficiency. Manage inventory, overhead and distribution channels more effectively with blast-dial and daily conference calls. Negotiate with vendors on price and delivery schedules. Increase dispatching efficiency; reduce fleet costs. Empower managers with conferencing to manage project flow and implementation.

HR Management: Conduct employees and management training more frequently; integrate question and answer sessions and small break-out groups in conference call. Web collaboration increases participation and enthusiasm. Provide verbal and visual details. Reduce travel and interview costs. Record and archive contract discussions. Shorten resolution time for negotiation and arbitration. Conferencing improves quality of call center personnel and reduces call time.
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<tr>
<th>COMPARE SYSTEM OPTIONS</th>
<th>CONFERENCING BEST PRACTICES</th>
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<tr>
<td><strong>Scalability</strong></td>
<td>Must be effortless with minimum disruption (24-192 ports) as needs change quickly. Plan on web collaboration; select interface and O/S for speed and ease-of-use. recommend: Avoid hidden costs: overpriced upgrades, growth limits, monthly/user charges and license fees. Discuss five-year plan with vendor; include your feature wish list and growth projections. Feedback pays off.</td>
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<td>24 – 96 ports</td>
<td>(some in smaller 8 port increments)</td>
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<td><strong>Robust Features</strong></td>
<td>Dial-out capability, passcode protected immediate and pre-scheduled blast-dial, call recording/playback/podcasting, billing and reporting, intranet administration. feature-forward options: real-time audio streaming, enhanced messaging (voice and text messaging), web conferencing, web scheduling and call management.</td>
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<td>System should include time-saving and futuristic functions for maximum efficiency and ease-of-use. Intuitive features promote additional call use and additional time/cost savings.</td>
<td><strong>Security</strong></td>
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<td>Varies from NONE to sophisticated levels and entry codes: beep, name announce/playback on entry and/or exit drop incorrect PIN entries; lock out additional callers Moderator, Administrator &amp; Participant access levels Moderator can identify, mute or remove callers</td>
<td>Confidentiality is a deal-breaker, choose the best security options you can afford. recommend: head count, virtual gavel, real-time moderator control screen &amp; DTMF controls, secure sidebar mini-conference capability, time-limited access codes.</td>
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<td><strong>System Admin</strong></td>
<td>Set-up and daily operations should require minimal effort; automatic reports and usage analysis are essential. Include programmable overbooking and traffic analysis. recommend: Ability to limit, intercept or drop any call or caller instantly.</td>
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<td>Robust Reporting Options/Templates</td>
<td>Automated warning/ report functions Real-time info: utilization, availability</td>
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<td><strong>Integration</strong></td>
<td>Requires cooperation from IT manager, telephone company and product engineers; address integration, training, user access and transition process during planning.</td>
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<td>Plug N Play Installation &amp; Training (On-Site or Remote)</td>
<td><strong>Support</strong></td>
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<td>Extended warranty options</td>
<td>Review support/service model; communicate expectations and expedite strategy with your Account Manager. Consider auto-overbooking and management reminders. Budget for certification training, spares, redundant/mirrored power and hard drives.</td>
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<td>Dealer support (for first-tier-only)</td>
<td>All in the same platform. Immediate and scheduled blast-dial is a great time saver. recommend: icalendar scheduling interface (for outlook, LotusNotes, etc.)</td>
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<td><strong>Call Type</strong></td>
<td><strong>Call Modes</strong></td>
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<td>Reservationless/ Ad-Hoc</td>
<td>Conversation Mode (meet-me calls) Presentation (Virtual Gavel) Interactive web controls</td>
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<td>Reservation and Repetitive Calls On-The Fly/ Instant Connect</td>
<td>Consider current usage and future requirements: Do you require polling, Q/A mode or wait-for-host modes? How would you like to integrate help desk/operators?</td>
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<td><strong>Vendor</strong></td>
<td>You want to make sure that the vendor is as stable as the system: newcomers may be debt-heavy or lost in a merger. Ask about business-to-business expertise and future vision.</td>
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<td>You want to make sure that the vendor is as stable as the system: newcomers may be debt-heavy or lost in a merger. Ask about business-to-business expertise and future vision.</td>
<td>Find a stable company with a history of teleconferencing expertise; look for a partner who understands strategic business requirements, market expectations and value. Avoid overkill: don't pay premium for extra options unless you are a phone company.</td>
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<td><strong>Custom Options</strong></td>
<td>Easy-to-personalize web interface, on-hold messaging and menu prompts/greetings. Affordable feature/function development: custom-design functions will require joint planning and approval of budget, scope of work and project management. recommend: Ability to control system defaults, department defaults and unique executive preferences should be standard. Secure sidebars are ideal for negotiations.</td>
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<td>Not available from all manufacturers Industry leaders already offer special systems for emergency ring-down, instant conferencing, enhanced messaging, secure sub-conferencing</td>
<td><strong>Interface</strong></td>
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<td><strong>Market Pricing &amp; Value</strong></td>
<td>Hybrid integrates VoIP (SIP), T1/E1 and ISDN (PSTN) interface, maximum versatility.</td>
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<td>Entry-level: $400 - $600/port Network Server: $800-$1200/port Custom Apps: $1500-3000/port</td>
<td>Feature-rich, all-inclusive solution extends system viability; extrapolate future traffic and efficiency in ROI comparison analysis. Negotiate extended support; top manufacturers will provide incentive for product loyalty.</td>
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Calling Outside of the “Box”

Traditional TDM connections can often start small as a single span ISDN PRI or T1 signaling to terminate into the conferencing bridge, and expand with multiple of these connections. While these PRI based connections have superior voice quality, the quality and programmability are now offered in both enterprise-based solutions and affordable, expandable technology for start-up and growing business concerns. Previously, user-owned teleconference systems were limited in scalability (available in 2 sizes: too small or too big) and came with pricey set-up and operating charges for on-site flexibility and control.

Over the last ten years, teleconferencing technology has continued to develop user and system management functions to meet business needs while improving internal navigability and reporting, and bringing down the per port price.

The newer hybrid connections have the option to use existing voice circuits as well as increase capacity using IP based voice termination on to the same conference bridge with ISDN PRI and/or T1 and SIP connections. Coordinating with Telco providers who are able to provide SIP termination will help limit the cost of expensive PRI or T1 circuits into their premises. It also offers the benefits of no capacity limitations with voice circuits and helps scale capacity rapidly.

There are only two companies who have been able to maintain their industry presence and reliability during that industry transition period, including Forum Communications. With numerous newcomers entering the conferencing market and pouring venture capital into advertising vs. company viability, it is necessary to evaluate all purchase decisions carefully. Right sizing and mergers in the telecom and IT industry have also dramatically impacted the ability to acquire support for their teleconferencing technology.

Affordability, reliability and scalability (both hardware & software upgrades) continue to weigh into decision-making. Innovative Buyers (looking for the “new, new thing”) continue to be a small share of the market. Business process and continuity planning are taking a greater stake in technology investment purchases overall.

**TELEMEDICINE**

Doctors are technology innovators in the teleconference industry. Technology continues to improve the ease and bedside manner for medical professionals who use conference media.

Patients can obtain multiple opinions and provide expert consults in life-saving events. Virtual consultation brings the best in the field to any doctor's office or the nearest operating room.

Home healthcare and hospice involve multi-disciplinary professionals. Conferencing improves case management and keeps family members connected as demand for these services reaches new heights.

Distance Learning provides medical training to isolated third world communities via teleconference. Interactive contact between faculty and students assists in diagnosis and in controlling spread of disease.

Surgical suites require specialized technical personal. Integrating wireless, wearable handsets with audio conferencing allows for virtual triage to bring personnel to where they are most needed.

Welcome to the Future

According to the market studies, the telecommunication industry, particularly the VoIP segment, is poised for stupendous growth. The USA alone is expected to convert to a 60% VoIP telephones.

The overall conferencing application service provider realm is forecast to bring in industry revenues growing from $2.9 billion in 2003 to $4.3 billion in 2008, producing a compounded annual growth rate (CAGR) of 8%.
With the advent of “out sourcing or off shoring,” our more diverse, distributed workforce (with telecommuters and distance collaboration) requires a comprehensive solution for a globally distributed workforce:

__Integrating corporate cultures, people, ideas and projects require constant communication, reliable channels and accessible media.

__Total Cost of Operation needs to go down as real-time productivity goes up, driving the need for virtual conferencing in every arena of business from planning to customer support.

__Purchase the equipment and it is customized to your requirements and environment. Scalability and value are better than ever. Increased conference accessibility provides measurable efficiency. Review past, current and projected expenses for true savings analysis.

__Create a new profit center: automated reporting gives you details for easy user billing and internal cost accounting. Host webinars and training for customers and partners, providing added value to relationships.

**Convenience, Consolidation and Savings**

To build and maintain teamwork and consolidation with utmost convenience at reduced costs is the bottom-line for selecting an automated voice conference system. Not limited to voice alone, the latest collaboration tools include web and video conferencing:

__Web conferencing is done using the internet to share documents and white boards to develop and refine team effort into a powerful, collaborative solution.

__Video conferencing allows people to talk face to face with the help of special equipment. Although a great innovation, these come with several shortcomings: they are expensive and require participants to go to specially equipped video conference locations. From a technical standpoint, the audio quality is not good (requires back-up audio channels), compatibility issues often create problems and delays.

__Audio conferencing is simple, inexpensive and gets the job done at no extra frills. This is a valuable asset whether companies are starting out or already spend thousands of dollars monthly for conference calls. Participants require only a telephone, be it a mobile phone, a soft (VoIP) phone or landline. On-premise conference technology should not include monthly or annual subscription fees, and this is an important factor to consider when choosing a manufacturer.

**THIS IS IT!**

In the current booming economy there are unprecedented opportunities for businesses to maintain aggressive growth.

Business Process Control continues to demonstrate the shortcomings of corporate infrastructure. Communications are particularly stretched beyond capacity. Newer, smarter, quicker ways of doing business challenge us at every corner.

Teleconferencing is a practical, secure, and economical business tool, available 24/7. More feature and connectivity options are available as manufacturers race to bring the best value to market. We can identify and quantify how instant collaboration technology benefits individual departments and business units.

Market demand has driven the telecom industry to provide more robust conference products assuring corporate users immediate payback and reducing expenses while letting businesses expand their conference capacity and efficiency.