



HEAD TO HEAD

interview

Bern Elliot - VP Gartner Research, and NEC's Product Marketing Manager, Keith Bromley go head to head to discuss the business case behind Unified Business Communications

ITO: Why are people talking about UC so much?

Bern Elliot: It is at the center of major changes enabled a few years ago, as communication became predominantly deployed as software on open platforms. Previously, communications went over separate networks, and now we see a convergence on Internet standards for all forms of communications. So, as voice, both fixed and wireless, and data communications go over TCP/IP, all of a sudden you find yourself in a very different environment, with similar platforms for applications and the same

them the tools to address their business issues.

ITO: How does an enterprise identify opportunities in this space? Secondly what business processes can change when you deploy a strategy?

Keith Bromley: Unified Communications is about simplifying the user experience and giving workers the tools to effectively manage daily communication and information overload. For businesses, determining UC applications is straightforward. First, they need to determine their

Another example is regulatory compliance. In the health care industry for example, HIPAA compliance demands the security of patient information as well as documentation that mechanisms are in place to protect this information. IP telephony systems use cost effective encryption techniques to protect patient data. At the same time, tying UC components with CPOE (Computerized Physician Order Entry) systems provides a single patient database that can be accessed by different devices while at the same time business rules can be added to automatically protect the data

“ all of a sudden you find yourself in a very different environment ” - Bern Elliot

network underlying them. This allows a huge amount of convergence between these formerly very different markets and you don't need 4-5 different vendors in each area. If the enterprises start to look at consolidating their portfolio and bringing the functionality together, the result is an active new convergence market.

Keith Bromley: Initially, vendors began conversations about Unified Communications because the convergence of voice and data enabled capabilities address many business issues. IP telephony is about value-add applications, and not simply supporting voiceover IP. Business owners started talking about Unified Communications to try and figure out what it is and how it benefits them. Once customers understand what Unified Communications can do, they find out how these capabilities can give

top business initiatives. Then, they map UC technology to the business driver to determine the appropriate UC applications. The exact UC capabilities will vary depending upon the customer and industry. For instance, a call center will be more interested in presence technology, screen pops, and customer data integration. With Unified communications, several of the business processes can be automated, so the need for manual intervention is reduced. This comes about because of the convergence of voice and data. An easy example is that Find Me / Follow Me capability allows the system to locate and reach out to a callee to see if they want to take a call from a particular caller. The system can first try the office phone, a Wi-Fi phone, a cell phone, and finally voice mail. When presence and status-based routing is integrated as well, the time to reach the callee can be minimized.

Bern Elliot: We recommend that enterprises identify work processes that are done frequently and have heavy communication dependencies. Unified communications integrated within the processes reduce the time it takes to accomplish these workflows. For instance, in a factory floor, if a piece of equipment breaks down, you want to find the closest individual to replace it. If you have notification and presence capabilities, you can find the individual who has the right skills more quickly. Now you're saving 10-15 minutes of manufacturing time and production time. The paradigm in more standard unified communications is individual group productivity and enterprises achieve savings by making individuals more productive. When you move it over to the business process you improve the flow of 100-200 times per day whenever that workflow is executed you reduce time or increase the accuracy. There is a certain >>

amount of buzz around communication enabled business processes (CEBP), because it applies some of this emerging communication technology directly to a business process.

ITO: What inhibiting factors should a company look at whilst trying to simplify the collaboration between traditional desktop users and mobile workers?

Bern Elliot: Inhibiting factors, come in different forms. At the early stages, it is simply understanding the new capabilities and communicating them to management. It is not always easy to come in and say, "we have different approaches and you ought to at least consider them". Some of the initial barriers are around helping people to understand the vision for business process change, and then getting permission to do the research to develop the business case around workflow and business process improvement. The first barrier is more

communication applications with each other and allow a services interface so that business applications can use them as well. Once you've mapped out how you would develop your infrastructure to support this, frequently there is organizational resistance that threatens certain individuals and requires change to work flows and business processes, and that kind of social change is always difficult. To sum up the challenges: initially, at least, they are developing and communicating the business case, then a series of technical challenges, and after that we shift back into an organizational issues and challenges with getting the project, the deployment and new methods accepted.

Keith Bromley: One of the main inhibiting factors is overcoming the need for Unified Communications. Companies must map the technology to the business need, or it is not a necessity. UC should be a business discussion, not a technology

database.

A second pitfall is that the company must use the applications. This sounds simple, but employees are often untrained on the new technology so they don't see the benefit or are intimidated by it. In either case, continue to use the old processes. If the employees don't use the capabilities then they won't see results.

A third pitfall could be that the UC project is overly ambitious and too much change is implemented at once. This causes significant strain on the whole company as well as the IT staff. For many companies, a phased in approach is better because the project is broken down into more manageable chunks. The IT department can implement the first phase, get a beachhead, and then begin phasing in additional applications in an orderly fashion.

ITO: One of the main concerns around UC is security- Do you feel

“ Companies must map the technology to the business need ” - Keith Bromley

an organizational one: getting buy-in and support from management. The barrier after that becomes much more technical, and the issue is that most enterprises have significant investments in communication infrastructure, PBX's, mobile solutions, and email. If they have conferencing capabilities, they have existing relationships and frequently all of those were established separately as stand alone solutions that do not integrate well. This is where the technology of unified communications comes in; we're able to integrate these different

discussion. Presence may not be important to a particular company, but employee mobility with a robust communications system may be vital. Once a company chooses to implement UC, they often hit pitfalls. For instance, the company must enable the business for mobility. If they use softphones and have telecommuting, they must create VPN's and enhance their data network security mechanisms. If the mobility comes from smartphones, they need to set up a software system to allow the smartphones access to the email system and then actively manage that

there are solutions in the market (and being offered today) that can totally secure the infrastructure through devices and applications?

Keith Bromley: The real question is whether there is technology to adequately secure a company's network. The answer to this question is yes, although there is always some risk. This is true for TDM networks as well. Most people think a conversation on an analog of TDM phone is "totally secure," yet that call can be tapped at many places. Therefore, a

>>

TDM network is not “totally secure”. Cellular calls are just as easy to tap with the right equipment. The interceptor of the call does not have to have a government court order and millions of dollars of equipment. As for Unified communications, there is security technology available, such as encryption for wired or wireless calls. A common, but fixable security breach comes from not using encryption for the Wireless LAN. There have been several cases where credit card data has been stolen from someone using hacking equipment in the parking lot of a retail store. Using WPA encryption instead of WEP or no encryption at all can eliminate this.

Other security mechanisms are built upon the data network such as closing firewall ports that are not needed, investing in Intrusion detection/prevention software, VPN equipment, implementing VLANs, etc. Other security tools include company policies. For instance, a company has a policy that does not allow the use of instant messages or the use of personal wireless access points will go a long way to eliminating security threats. Most employees will abide by their company’s published policies. The ones that don’t can be identified and dealt with accordingly.

Bern Elliot: Security is a series of technologies and processes that are put in place, monitored and adjusted in an ongoing basis. Additionally we deal with applications that already exist and have security associated with them. As we look at unified communications, we don’t see something new in security coming about because of unified communications. Every bit of communications involved with unified communications is in communications already. They are just not unified, and unifying them does not increase risk.

We recommend that enterprises have good security policies and procedures in place, and continue them. For instance, there are a series of best practices around ensuring security in a voiceover IP network even if it’s going over a TCP/IP network that’s shared with other elements in the enterprise. Those best practices need to be continued but voiceover IP and data applications being integrated with communication applications do not introduce new security factors.

ITO: How does a company determine which UCC approach best fits their planning cycle?

Bern Elliot: There is recent research that has looked at some different approaches, and they are compatible but, because different vendors approach the problem from different standpoints, it appears initially that these are different paradigms. The approach that has been around the longest is the telephony centric approach. Here PBX and IP PBX vendors, as well as unified messaging vendors, are enhancing and advancing their platform, opening it up and adding new functionality onto it. They call that approach unified communications, and it is useful where you have one number that external people dial but that in turn attempts to dial several numbers internally. Similarly, a roaming or fixed mobile convergence, where you can pick up a phone call on your mobile phone that you started at your desk phone and walk out of the building and still participate on that same conference call, provides a seamless mobility that can be useful, but it is only one part of an overall unified communications portfolio and solution.

Another approach is the email and collaboration eccentric approach where well-known email vendors

Keith Bromley, NEC Unified Solutions



Keith Bromley is a product marketing manager for NEC Unified Solutions, Inc., with more than 16 years of telecommunications experience.

Keith is responsible for marketing activities for NEC’s IP telephony enterprise solutions, including all applications and platforms, as well as unified communications.

As a spokesperson for the industry, Keith is a subject matter expert on unified communications, IP telephony, SIP, wireless and wireline infrastructure. Keith joined NEC in 2004 as the product line manager for the UNIVERGE SV7000 VoIP server. He has written many industry whitepapers/articles covering topics on IP telephony drivers, SIP, unified communications, as well as discussions around ROI and TCO for IP telephony solutions.

Prior to NEC, Keith worked for several national and international telecommunications companies including DSC, Metro-Optics, Cisco Systems and Ericsson, for whom he was industry liaison to several technical standards bodies. He holds a Bachelor of Science in Electrical Engineering.



To hear or download the full interview with Keith Bromley, please log on to: www.itoamerica.com/ubc

Bern Elliot, Gartner Group



Bern Elliot is a Research Vice President in the Communications Applications area. His research focus is Unified Communications, Contact Centers, and VoIP.

Prior to joining Gartner, he served in a variety of technical and managerial roles. Responsibilities included CTI Architect for two Fortune 100 financial services firms, principal architect for a global message network for a Fortune 10 firm, strategic assessments of call center products for major North American and European switch vendors, and Internet product planner for a wireless messaging start-up.

Mr. Elliot was founding chair and coordinator for several Internet messaging and directory standards initiatives and has worked with Wharton Business School faculty developing models for telecom technology adoption. He holds a Masters Degree in Computer Sciences from the University of Massachusetts/Amherst and patents in the voice messaging groupware area.

also have collaboration added web conferencing and instant messaging to their application. The big examples are Microsoft's Live Meeting and IBM's Same Time. Both added instant messaging capabilities a couple of years ago and have now been moved into a unified communications model, but they are not by themselves a unified communication solution.

In the last year we have seen a broad portfolio approach or a best of breed approach where vendors partner up and nail down the integration between their parts and between their various servers so that users can get a seamless and better integrated set of functionalities even if not from one vendor. There is not one vendor today that can deliver a complete unified communications portfolio, and there may never be. Today, for instance, there is a big difference between the vendors that can

provide a highly scaleable email and the vendors that can provide highly scaleable voice. The way to get those together is by having the vendors work together seamlessly. We expect that this approach to become the dominant model. Enterprises that invest in telephony can start talking to telephony vendors about how they get to the more integrated Best of Breed Solutions. Similarly enterprises that have invested in a Web and IM desktop presence also would talk to their vendors and understand how they migrate those ahead. Both Microsoft with their OCS product and IBM with their Same Time telephony have advanced their respective IM and presence portfolio to broadly include partners who can fill in other parts of the portfolio.

“UC encompasses a broad portfolio of optional products that can work together”.

- Keith Bromley

Before we leave the topic, these are the predominant models today, but we are also seeing the emergence of some new models. One of which is a hosted or cloud based solution, where enterprises access the communication functions they need but the actual applications and servers are hosted in a carriers or an ISP/ ASP's network. While they're still early stage, perhaps in then next two years we will see that approach mature to the point where it becomes another important point of consideration for enterprises.

Keith Bromley: This comes back to the type of business discussion and their business drivers. Some vendors come at UC from the desktop approach and others from the infrastructure approach; most businesses may be better served by a middle of the road approach. The middle of the road approach assumes that UC encompasses a broad portfolio of optional

products that can work together. A primary component is a special client that allows you to make/receive voice calls, make/receive video calls, send/receive text messages, set personal presence settings, observe presence of others on your network, route calls, create/import contact information and Buddy Lists to a single database, and access incoming/outgoing call logs. Unified messaging products allow the consolidation of voicemail, email and text messaging so that the user has a single, consolidated messaging box versus having to access different applications. Smartphones combine unified messaging with cell phone, Internet web access, text messaging, Wireless LAN dual mode capability, and instant messaging. A mobile client is software that can be downloaded into the smartphone that allows

>>



To hear or download the full interview with Bern Elliot, please log on to:
www.itoamerica.com/ubc

users access to their corporate network to send/receive messages through their corporate PBX. This means that the user would have integrated access to their corporate network as well. Other solutions integrate contact center, Wireless LAN, conferencing capabilities, and additional mobility features into the UC solution. The UC solution can then be integrated to back office systems to automate certain business functions, which then decreases response times and increases productivity.

With this broad interpretation, the business will focus on what they need and will find plenty of tools to help them achieve their goals, whether it consists of cost cutting, improving efficiency or automating business processes.

ITO: Do you see social networking applications overtaking IM in the enterprise as the most productive way of communicating?

Keith Bromley: IM has clear business applications due to its fast response time. For the financial industries, a few minutes or seconds saved could be the difference in hundreds or thousands of dollars. The business need for social networking isn't as clear. While social networking is growing in personal lives and for very small businesses, it's not growing as fast for enterprises. One drawback for business workers is that their contact information will be more freely available which will increase SPAM and sales calls. It will be interesting to see how this plays out.

Bern Elliot: From the experience I have in unified communications, no. It's early stage and there are very interesting ideas in the social networking side, but the limits are enterprises figuring out how to use this technology for business purposes. It hasn't been fit into the day-to-day

business usage. Once enterprises understand how those applications can be useful, they can consider overlaying communication functions on top of that. The enterprises that I talk to from a communications standpoint are not looking at unified communications and integrating their business communications with social software applications and Web 3.0 environments.

ITO: What instant business benefits should a CIO see if deploying a comprehensive UC strategy?

Bern Elliot: They should look at it in a couple of ways. There are tangible benefits if they look at areas for point solutions: in the telephony area, conferencing area and through consolidation and reduced administration cost. There are some softer benefits in terms of individual productivity, where bringing in better convergence across communication functions or making it easier to access information will improve the individual's productivity. Similarly, by bringing in some group and social collaboration tools, they may expect to see improvements in groups whose output is extremely important to the enterprise. Some of the benefits are harder to quantify, and while valuable, it seems that today, CIO's are looking for a hard return on their investments in the area of communications. While soft benefits of personal and group productivity are important, consolidation and administration are two areas where they can expect to see specific improvements through moving to different communications infrastructure. Finally, if specific business processes are identified that have heavy communication dependences and an investment is made to address those communication dependencies then some specific and measurable

improvements could be obtained.

Keith Bromley: Most business will find that user mobility addresses a business initiative. This will produce productivity benefits for the company right away including Single Number Reach, reduced time for decision making, faster response times, and improved customer satisfaction. For instance, one customer ranked Single Number Reach as 1 of their top 3 initiatives. Another company adopted smartphones for their IT department to use as a primary response device for when staff were on-call or were on the floor fixing problems. The smartphone allowed the staff to be called, receive email alerts of problems from the data network, receive trouble tickets and receive ordinary emails. Costs savings are often recognizable using IP conferencing systems. By using toll bypass and bringing conferencing systems in-house, businesses can realize easily quantified cost savings. Collaboration software used for internal webinars and video conferencing can minimize travel for internal meetings. The CIO must keep in mind that the level of savings is dependent upon the level of investment. Information shows that companies that fully invest in UC technology receive the maximum benefit compared to companies that do not invest as much. Part of this comes from the cost of entry into IP telephony, or VoIP as it is often called. Voice over IP is one application, and therefore a small subset, of what can be accomplished with IP telephony and Unified Communications. After companies make the additional investment beyond voice over IP is when they start to see the productivity and cost savings. ■