

When BUSINESS COMMUNICATION



is CRITICAL

Critical communications are vital for both day-to-day operations and emergency scenarios. But guaranteeing that people receive and use the communication when they're overwhelmed with data every minute of the day is more challenging than it seems. While companies spend millions

of dollars developing critical business content and making it available via communication vehicles such as Web-based portals, many of them cannot guarantee that the information is delivered to users when they need it, in a form that they can readily comprehend and use. The problem is exacerbated for mobile workers and "disconnected" users. These highly mobile individuals, such as executives, sales personnel, partners and distributors, are typically responsible for generating revenue; unfortunately,

Is access enough?

they have the most difficulty obtaining the information they need.

To address these issues, CIOs must ask themselves: "Is access enough?"

"When people can't obtain or interact with the right information at the right time, they can't make good business decisions," says Sandi Resnikoff, CTO and vice president of infrastructure at National Broadcasting Corp. (NBC), a major TV network whose business depends on communicating breaking news and program changes to more than 200 affiliates across the United States. "That's a serious obsta-

cle for companies that depend on time-sensitive information. In many cases, CIOs deploy information systems that fail to engage users."

Resnikoff has put her finger on one of the most important issues facing today's information technology (IT) professionals: Given the glut of information with which most business users have to contend, critical bits often get lost in the shuffle.

NBC is a prime example. Affiliated TV stations are an integral part of NBC's overall broadcast service. Unfortunately, with its old communication system, there was no guarantee that affiliates actually read and responded to real-time media alerts. The alerts are used for communicating breaking news feeds, programming changes and other essential events. Delayed interaction to this information was leading to lost airtime, lost advertising revenue and programming delays.

The solution was to establish an urgent messaging system with guaranteed delivery capabilities based on proactive technology. The software allows NBC to deliver instantaneous alerts to affiliates and receive confir-



mation when affiliate managers interact with the data.

“When a broadcast alert is sent out from NBC headquarters, all 200 affiliate programming managers receive an ‘immortal flash’—a small box that pops up on the desktop—and the NBC chime sounds,” Resnikoff explains. “As soon as managers click on the window and retrieve the information, we are notified at headquarters. If managers do not respond, the alerts are escalated to their pagers or cell phones until the information is retrieved—and receipt is confirmed.”

Corporate Agenda

NBC is not alone. Critical communication has been pushed to the top of many CIO agendas. In many cases, the problem begins with the way online information is managed and exchanged.

Most corporate communication sys-

tems are built around Enterprise Information Portals that are ideal for aggregating information and managing content. But they don’t guarantee usage or ensure that important information gets to the people who need it.

“The self-service approach just doesn’t cut it for critical information,” says Tom Davenport, director of the Accenture Institute for Strategic Change and author of *The Attention Economy, Understanding the New Currency of Business* (Harvard Business School Press, 2001). “The Internet and e-mail have increased by several orders of magnitude the amount of information an individual can easily access,” adds Davenport. “Telecommunications bandwidth is not the problem. Human bandwidth is the problem. Solving the attention deficit means finding better ways to organize attention.”

According to Eli Barkat, chairman

and CEO of BackWeb Technologies, CIOs often take the heat from other senior executives when critical information doesn’t reach its intended recipients—whether it’s sales training materials or financial reports. “You put the new price list on the portal, and two months later the CFO comes storming in wanting to know why POs are still arriving with old prices,” he says. “You spend millions on a new corporate communications strategy, and the CEO returns from the field wondering why none of the sales reps have a clue about the new strategy. The marketing organization spends six months developing new sales tools, but has no way of knowing if the sales team is actually using them.”

The upshot is clear: Despite the best intentions of the people developing portal content, critical information does not always get through. “Opening a shop in the mall doesn’t guarantee revenue,” continues Barkat. “People have to come to your store. The same goes for portals. Dozens of CIOs have told us the same thing: Unless they can control and maximize the usage of the portal, there is an exposure risk. Information is presented but not used, and ROI vanishes.”

The solution is to establish a portal in which information “finds” the appropriate users, whether or not those users are connected to the network. “If a user does not acknowledge receipt of information, this incomplete communication may create other problems,” says Gartner Consulting Director J.B. McCrummen. “For example, making an expenditure might violate newly announced budgets or a product update might need to be installed on the next visit of the service engineer, causing additional and unnecessary costs.”¹

Companies like Guidant Corp. maximize their content investments by prioritizing, delivering and promoting usage of critical information. Headquartered in Indianapolis, Guidant is a \$3 billion medical technology company that develops and manufactures products to treat cardiovascular disease. In an industry where lives depend on thorough understanding of product information, Guidant needs to make sure that its national network of 1,000 medical device sales representatives can rapidly assimilate information about new products.

“It’s an ongoing challenge: How do we get marketing and training material in the hands of our reps in a timely manner so they are equipped to meet with

Emergency Communications

SHOCK WAVES from the Sept. 11 terrorist attacks quickly reverberated around the globe. At NBC headquarters in New York City—only a few miles from the smoldering World Trade Center towers—CTO Sandi Resnikoff was one of thousands to make a hasty departure. Yet program updates and scheduling changes—the lifeblood for NBC’s 200 affiliates—were delivered throughout the day and over the course of the ensuing weeks in response to current events in New York City and Washington D.C. “We could see the World Trade Center from our building and we had to quickly evacuate the premises,” recalls Resnikoff. “Everything was in an uproar, but we used our urgent messaging system to communicate instant scheduling changes that day and to communicate breaking news with all the NBC affiliates.”

Since that fateful day, many CIOs have realized the importance of having a fail-safe communication strategy, along with an infrastructure that can guarantee delivery of critical information.

Disaster recovery and business continuity were ranked by Gartner, Inc. as two of the top five issues on the 2001 CIO agenda,² and a recent META Group study found that 56 percent of business continuity execution issues center on communication.³ “CIOs must focus on communication integrity and address gaps in continuity plans that may be affected by disasters,” says Eli Barkat, chairman and CEO of BackWeb Technologies. “Stability and security requirements are driving the need for communications in the new age of disaster preparedness.”

Clearly, the ante has been raised for CIOs tasked with building communication portals. Unfortunately, most content management tools are designed for managing and organizing broad scale communication, not critical communication. “A proactive portal with escalation and guaranteed delivery capabilities offers important supplementary capabilities,” suggests Gene Phifer, an analyst with Gartner, Inc. “It’s important to have an emergency delivery channel not just for major catastrophic events, but for smaller ones, like weather-related office closings. CIOs need to ensure they have the necessary infrastructure to convey timely communication.”

Companies have spent millions of dollars on the back end of their portals—integrating applications, developing content and streamlining document management activities. Having a proactive portal strategy ensures those investments will pay off when they are needed most.



customers?” asks William McConnell, vice president and CIO at Guidant. “We are a high-tech business, and 65 percent of our revenue comes from products that are less than 12 months old.”

Streamlined Communication

Like NBC, Guidant is using BackWeb® Polite® communications technology to streamline the distribution of sales and training materials to its highly mobile sales force. Formerly, this information was sent in paper form, making it difficult to monitor its receipt. Guidant didn't want to leave these critical communications to chance so McConnell's team set up a portal that delivers important information directly to subscribers' laptops whenever they connect to the network. “When reps dial in or use the VPN, an alert appears in the lower part of the screen telling them if new material is available,” says McConnell. “If it is time-sensitive—such as an announcement about FDA approval or a bulletin about a product recall—an alert will flash as well.”

McConnell says it was relatively easy to set up this infrastructure. Guidant uses BackWeb ProactivePortal Server™ to actively find users and deliver crucial content to them—wherever they are.

couriers like FedEx—the recipient's signature is proof that they received the package. Web portals need to guarantee this ‘last mile’ of usage.”

Many companies entrust critical information to e-mail but individual communications often get lost in the general inbox deluge. “E-mail communication is so common it's difficult to get an urgent communication to stand out,” Resnikoff points out. “Periodic, urgent messages with media-rich text can keep people passionate and inspired. So long as it is not overused and the content has obvious value to the recipient, we find people appreciate having windows and alerts appear on their screens.”

Gartner Consulting's McCrummen stresses the importance of closed-loop notification in the event of a system crisis, such as when a software virus infects the network and employees must be immediately notified. “Sending information or updates to PCs, laptops or other devices

Making E-Business Investments Pay Off

These information delivery dynamics are particularly important for e-business applications. Many companies bought into the value of e-business systems for generating revenue, reducing costs, streamlining production and getting to know customers. Now they are waking up to the realization that implementing the software and training users is not enough. The Internet is a platform for managing business, not just for publishing information. But no company wants to entrust critical business information to a platform that's not guaranteed.



Eli Barkat, chairman and CEO of BackWeb Technologies

The rise of e-business information is popularizing what Gartner, Inc.'s Gene Phifer calls “Gen 3” portals. According to Phifer, the first generation of portals mainly focused on aggregating content, while the second generation took on the attributes of application frameworks. Third-generation portals include proactive capabilities to allow critical infor-

Portal ROI (return on investment) = Content + Content Usage

BackWeb helps companies maximize their content investments by prioritizing, delivering and promoting the usage of critical information to customers, suppliers, partners and employees across the enterprise.

Users can subscribe to content they want to receive and specify which content will be delivered offline.

Portal Assessment

This strategy is in keeping with advice given by attention experts like Tom Davenport, who say a conscious information strategy should assess what information is truly important to the organization's success and then ensure that it reaches the right people's attention. Barkat agrees. “You must ensure not just that information is available, but that it is received,” he stresses, pointing to other types of communication systems as examples of the proactive model. “The telephone may be intrusive, but when you reach someone at least you know they got the information. The same thing applies to

and having a confirmation that the data was received is becoming a critical role for portal technology,” he says. “The user needs to know the urgency and have the confidence that a solution is being deployed. It is also critical that the IT department know that a fix was effectively delivered and installed.”⁴

For example, when the worm e-mail virus W32/Goner recently hit, BackWeb's IT department used BackWeb's own closed-loop reporting technology to ensure that employees were aware of the virus and to confirm whether or not they had installed an essential anti-virus patch. The BackWeb technology allowed IT pros to quickly assess which employees had activated and installed the necessary software, and to follow up immediately with any stragglers.

information to reach the appropriate user in the appropriate way. Users can establish preferences for how information is prioritized, request notification of delivery to a mobile device when a user is offline—and even request that the content be made available for offline usage. “Gen 3 portals use message alerts, multichannel delivery, guaranteed interaction, and escalation to ensure critical content is received and acted upon,” Phifer says. “Each user's interaction with the content is guaranteed and tracked.”

For example, Guidant uses BackWeb technology to monitor how sales reps interact with new product and service bulletins. Information technology managers can generate reports to discover how often sales reps interact with the content, when they last received content and which content they interact with

⁴ “Profitable Enterprise Portals,” J.B. McCrummen, Dec., 2001.

About BackWeb

BACKWEB HELPS COMPANIES maximize their content investments by prioritizing, delivering and promoting the usage of critical information to customers, suppliers, partners and employees across the enterprise. BackWeb ProactivePortal™ technologies allow companies to ensure that the right people have the right information at the right time. These technologies are the result of hundreds of man-years of development effort and experience with hundreds of customers.

Many Fortune 500 companies rely on BackWeb to manage critical communications across the enterprise, maximize their portal investments, and streamline their e-businesses. By ensuring that critical portal content is automatically prioritized, delivered, received and used across the enterprise, CIOs can promote their business-critical communications and leverage their portal investments. For more information, please visit us on the Web at www.backweb.com.



most frequently. “Our reps are constantly in hospitals or moving between hospitals and we want to make sure they have the right material to present to physicians,” McConnell says. “Now we can monitor content usage in a closed-loop fashion to ensure that each rep is equipped for the job.”

NBC does the same thing with its urgent messaging system. BackWeb technology determines whether or not users have received the content and can send an alert or reroute the information to a secondary device—such as a cell phone or pager—until receipt is confirmed.

Driving Proactive Portals

This type of offline access capability is one of the primary business drivers for Gen 3 portals. According to David Yockelson, an analyst at META Group, offline access to portal content increases the potential for usage and portal payback. “Portals are passive by nature,” says Yockelson. “Despite

their ability to present contextually relevant information, they cannot deliver it ‘piece-meal’ to the desktop. This will become a bigger issue as more critical data is aggregated. BackWeb’s proactive delivery understands information criticality and can add ROI to portal deployments.”⁵

In many cases, the value of information is linked to the freshness of that information. For example, the difference between getting to a sales lead or service alert in five minutes or five hours could mean the difference between winning and losing a customer. Mobile computing is not just about pulling information. It’s about delivering information as well—especially when that information is carefully targeted to particular people in particular situations. “As alternative communication channels proliferate, we need software that can escalate information delivery and notify users even when they are disconnected from the network,” says Davenport.

Barkat believes 50 percent of portal ROI is based on disconnected users. “The people who drive revenue are typically the ones who spend the most time out of the office,” he reasons. “Executives, field sales personnel, partners, distributors—these are the customer-facing people, and also the ones who are often on the road. You can’t expect them to return to the office to gather information, yet that’s where the information typically resides. There is a huge disconnect here.”

Surmounting Technical Hurdles

Making sure each of these users has the necessary information is important—but not at the expense of overloading the network. McConnell advises that CIOs be selective about the information they decide to send through proactive channels, and to make sure they have the right software for the job. For example, the BackWeb Polite communications technology allows Guidant to send information only when network bandwidth is available, so users can receive content in the background and

without creating performance interruptions to other network applications. “Multimedia Flash Alerts automatically appear on the user’s screen to alert

sales representatives to the arrival of new content without interfering with current applications in use on the desktop,” McConnell says.

The infrastructure should enable efficient delivery of massive amounts of content and be able to manage large events in a network-sensitive fashion. “What’s required is massively scalable content delivery with accurate portal synchronization, offline access and inherent data management,” Barkat says. “When it comes to portal ROI, these are

the three key technical challenges that CIOs need to solve.”

Ensuring a Return on Portal Investments

Analysts at Cahners In-Stat Group report that businesses are focusing their IT spending on improving communications and networks as they shift resources away from more ambitious endeavors such as online marketplaces and e-commerce systems. Making it easier to access crucial information—anytime, anywhere—ensures that important decisions aren’t delayed. This has a direct impact on costs and, ultimately, profits.

Resnikoff puts it in practical terms. “The job of the CIO is connecting people with information,” she says. “We partner tightly with the business to develop technology to solve their problems. We won’t undertake a new technology project unless it has a very good ROI. In this instance, we’re saving about \$300,000 per year, which adds up to a two-year payback for the proactive portal technology investment.”

McConnell concurs. “We have overwhelming support for the value that this technology is providing,” he concludes. “Ninety percent of the reps are using it, and they are getting the information they need. In our case, the ROI is more anecdotal than measurable, but the feedback we’re getting is that the technology is improving productivity and helping the reps do their jobs.” ●



William McConnell, vice president and CIO at Guidant Corp.