

wireless

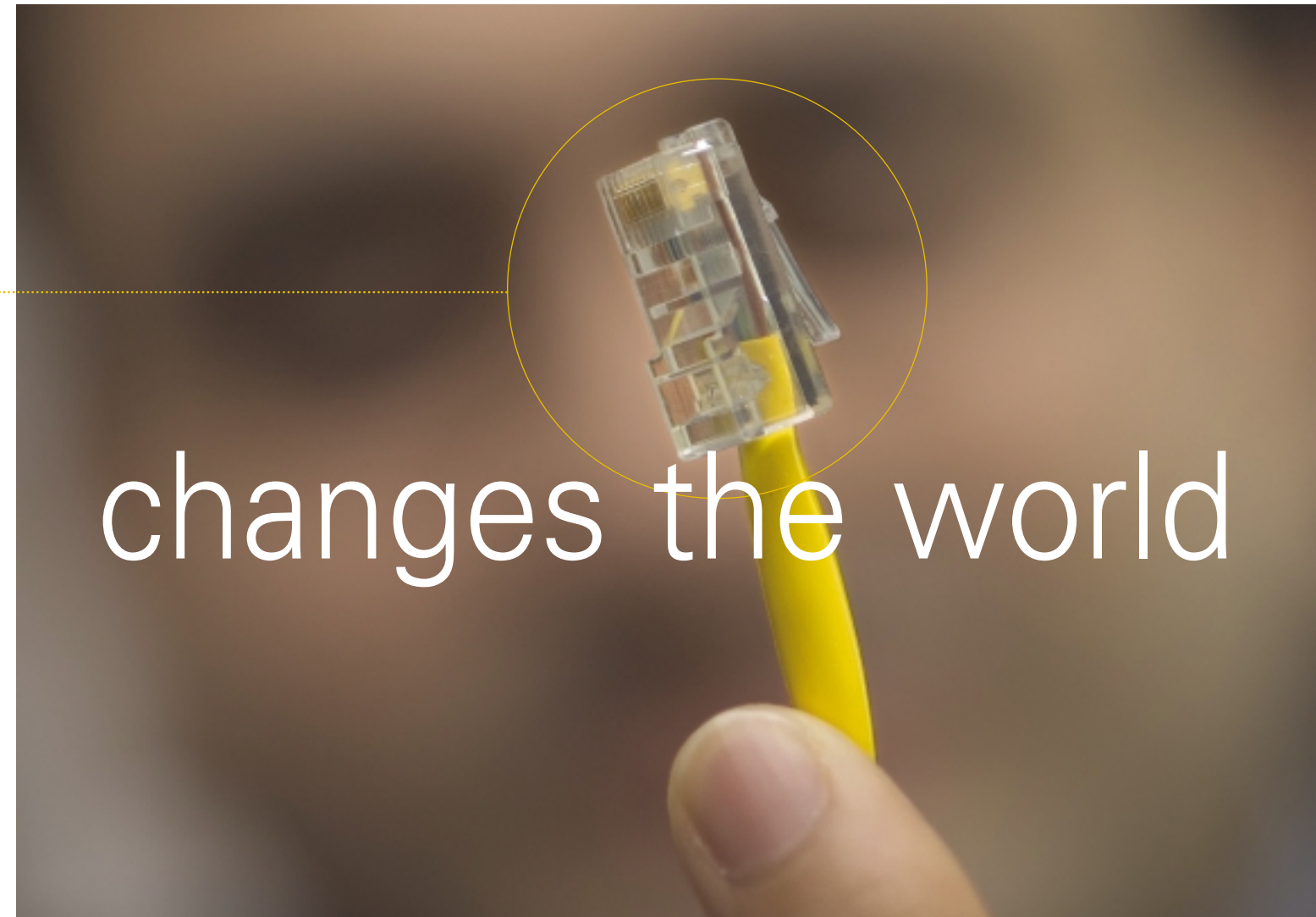
CA helps organizations manage their wireless ways. BY PATRICIA KUTZA

REMEMBER WHEN "WIRELESS" MEANT "CELL PHONE"? AND WHEN "HOTSPOT" CONJURED up images of the equator at noon? While most people agree that the Internet has impacted our lives dramatically, some say it is the advances in wireless technology that will transform not only our vocabulary but also how we define the very boundaries of our homes and workspaces.

More than just a convenience or a novelty, wireless technology is changing the way businesses do business. In a recent study by *CIO* magazine of 250 IT executives, 52 percent of respondents said wireless technologies are important to their organizations' overall business goals. They also said key drivers to wireless adoption include boosting productivity, efficiency and improved user satisfaction.

However, the same survey, "The Payoff of Wireless IT Investments," cited security as the top challenge to implementing wireless technologies, followed by user support and privacy. So it's no wonder that CA is working with innovation partners to beta test its CA Wireless Site Management (CAWSM) solution.

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changes the world

Wireless convenience comes with an increased need for management and security.

"CAWSM provides network administrators and IT security officers with an effective way to manage an enterprise wireless network," said Sumit Deshpande, CA's Vice President of Development. This is vitally important because as Wi-Fi hotspots pop up like daisies, the risk of compromised corporate data increases.

WI-FI PROLIFERATION

By 2005, there will be more than 151,000 hotspots around the world, according to research firm Gartner Dataquest. Most will be located in retail outlets, such as Starbucks Coffee, as well as airports (at least 423 of them) and hotels (approximately 24,000). But some are showing up in unexpected places. Lufthansa Airlines passengers can surf the Internet wirelessly using its FlyNet system now installed on some planes. Users can send and receive email and even connect to their companies' virtual private networks while in flight. FlyNet works with satellite connection provider Connexion by Boeing, and passengers access the service via a WLAN. Lufthansa plans to equip its entire long-haul fleet with FlyNet by 2006. According to Boeing, the ISP has "definitive agreements" with Scandinavian

Airlines Systems and Japan airlines to equip their long-haul aircraft with the Connexion service. Singapore Airlines, China Airlines and Korean Air also have announced their intent to install the service. And in July, Siemens AG became the ISP's first global customer for high-speed, in-flight Internet services, giving 200,000 traveling Siemens employees the choice to remain connected in the air.

McDonald's plans to provide broadband access for "windshield warriors" (sales reps or other workers who spend a lot of time on the road) in 6,000 restaurants by mid-2005. The restaurant may even work broadband into its marketing mix; you might receive free Internet access in exchange for ordering a promotional food item.

TAG, YOU'RE IT!

In retail, the buzz is all about radio frequency identification (RFID) technology. RFID promises to reduce labor costs, simplify business processes and improve inventory control.

Here's how it works: Labels embedded with a single computer chip and an antenna communicate with a radio (often called an interrogator), and the radio reads the information stored on the chip.

Unlike scanning bar codes (see sidebar: Bar Codes — Move Over!), RFID isn't hampered by line-of-sight limitations or precise orientation, which means a cashier or inventory clerk doesn't have to position an item a certain way or a certain distance

bar codes — move over!

Smart labels, also called radio frequency identification (RFID) tags, are poised to replace those ubiquitous bar codes that first appeared on a 10-pack of Wrigley's Juicy Fruit Gum in 1974.

Back then, bar codes were cutting-edge technology, helping both manufacturers and retailers track their inventory. Scanning bar coded merchandise considerably streamlined the transactions.

Today bar codes, with their 'read-only' capability, are considered 'dumb' compared to the read-and-write-enabled RFID tags that exact highway tolls or track airline baggage. On a per-unit basis these tags are expensive and in the long run will be replaced by a less costly variety.

Many manufacturers are watching Bentonville, Ark., USA-based Wal-Mart as it transitions to RFID merchandise tracking. Wal-Mart suppliers, such as Hewlett-Packard, Kraft Foods, Proctor & Gamble and Gillette are participating in the RFID trial, and 21 of the more than 100,000 products Wal-Mart carries are included.

from the radio to allow the data to be scanned. Also, RFID tags can store and revise data.

RFID technology is not just for inventory management, according to In-Stat/MDR Principal Analyst Allen Nogee.

"It will be used for location tracking and even homeland security," Nogee said. "In the future, cargo shipping containers may be scanned where they originate and the full details can be stored. When the cargo arrives, it can be scanned again and both scans compared for evidence of tampering."

WIRELESS MANAGEMENT

The now-ubiquitous cell phone continues to evolve, morphing into a business-entertainment center for many wireless workers.

"The cellular phone is becoming one of the convergence points for entertainment, computing and navigation," said Neil Strother, an In-Stat/MDR senior analyst. "But it's not the only one. Smartphones will be a much bigger market than PDAs, because the mobility they offer is so much more powerful with a good, converged device, such as a Treo 600 (smartphone) or a Blackberry (wireless handheld device)."

But wireless convenience comes with an increased need for management and security. That's why the University of Arkansas at Pine Bluff (UAPB) called on CA to manage its 141-acre wireless-enabled campus. "UAPB is one of our most forward-thinking customers," CA's Deshpande said, "and it is one of the first universities to run a completely converged IP network for data, voice and multimedia."

Making that idea a reality is easier said than done. The CAWSM solution must provide secure wireless connections for more than 3,000 students and 900 staff.

"The most challenging task is overall management of all the media," said Maurice Ficklin, UAPB's Director of Technical Services and Chief Information Officer. "We anticipate a more comprehensive ability to manage, secure, monitor and maintain our existing as well as expanding wireless network. Wireless is a booming technology, but it requires the right tools to be successful."

In fact, CA uses its own software to manage its wireless network and provide secure access for its own growing mobile workforce.

"CA's Global Information Systems (GIS) is one of the most important beta testers of CA Wireless Site Management," Deshpande said. "They already use the Unicenter® option to centrally manage and maintain the health and performance of wireless access points on the CA network. If someone brings in an unauthorized wireless access point and plugs it into the network, GIS is able to detect its presence and take necessary steps to correct the situation quickly."

For better or worse, the days of being tethered to a desktop computer are long gone. "I believe we will continue to live in a world where people use multiple devices depending on their location or situation: at home, work, play or simply moving about," In-Stat's Strother said.

And CA will be there to provide software and solutions to manage our wireless ways. ■

IN A CIO MAGAZINE SURVEY, "THE PAYOFF OF WIRELESS IT INVESTMENTS,"

CIOS REPORTED SUPPORTING THE FOLLOWING DEVICES ...	AND THESE APPLICATIONS:
73% Mobile phones	83% E-mail access
71% Laptops with wireless capability	64% Calendar/scheduling
60% PDAs	60% Web access
51% Pagers	45% Personal productivity
	44% Text messaging