

A CMP GUIDE

# THE BUSINESS-CRITICAL

# PC

PART 3 OF 4

## Business-Critical PCs for SMBs: The New Mobility



It's amazing how simple and **cost-effective mobile applications** for small-to-medium businesses can be. Many of the **3,000 IT pros** in CMP's global survey are using mobility to get closer to customers and run more efficient businesses.



### Top Mobility Tech Issues

- **62%** of SMBs say battery life is most important
- **47%** say integration with desktop or other mobile device
- **36%** say wireless network connectivity is a critical issue

### INSIDE

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for survey data, more deployment advice and in-depth SMB technology information.



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— **Art Johnston**,  
CIO of **ATC**.

"Customers who find a book using our PDA search system buy the book almost without fail."

— **Jong-hwa Kim**,  
director, **Seoul Book Center**.



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# Business-Critical PCs for SMBs: The New Mobility

WITH APPLICATIONS RANGING FROM WIRELESS E-MAIL TO WIRELESS DATABASES AND WIRELESS MULTIMEDIA, SMBs ARE USING **MOBILE COMPUTING TO GAIN** IMPROVED CUSTOMER SERVICE AND **MORE COST-EFFECTIVE BUSINESS OPERATIONS.**

By Steve King

EACS Ltd., an award-winning IT solutions provider located not far from London, has a history that can be divided neatly into two eras: Before Wireless and After Wireless. EACS' managing director, Mike Dearlove, sums up his life in the Before Wireless era: "Whenever I left the office I was constantly concerned about keeping in touch. When I

went into a customer meeting, I would turn off my mobile phone, and then later I'd try to catch up by listening to a long, time-consuming sequence of voice-mail messages."

Dearlove goes on to describe what life is like today for EACS staff members who are equipped with wide-area wireless capability: "With our wireless notebooks and Pocket PCs, we can be out of the office and still keep in constant touch with our business operations. I can check my wireless e-mail throughout the day and quickly respond to questions and updates from our sales, technical and administrative staff. I can also be very responsive to queries from customers and partners on a virtually 24 x 7 basis." As can be seen at EACS and other leading SMBs around the world, wireless computing is rapidly becoming a business-critical dimension to IT, letting SMBs leverage their precious internal human and information resources in ways that would have been unthinkable just a few years ago.

All of the wireless applications for SMBs discussed in this article can be achieved on notebooks, Pocket PCs, smart phones or tablet PCs used in conjunction with widely available wireless networking services. There are essentially two major approaches to wireless computing these days: Wireless WANs and wireless LANs. Wireless WANs based on GSM, GPRS, CDMA or similar cellular services can be accessed directly by mobile PCs or by mobile PCs linked to a mobile phone. Wireless LANs, on the other hand, are available locally in airports, office buildings, convention centers, coffee shops, hotels and other public places (hotspots). Wireless LAN access is via 802.11x interfaces built in or added to mobile computers.

## WIRELESS E-MAIL

For many SMBs, a wireless computing investment can be justified by just one appli-

Ray Stewart,  
Infrastructure Consultant,  
EACS Ltd.



cation area: wireless e-mail and messaging. Doug Dedo, product manager for the Mobile Devices division at Microsoft, puts it this way, "There are plenty of advanced wireless database and multimedia applications that justify SMB investments in mobile computing. But for many SMBs, wireless e-mail alone is the killer app." With wireless e-mail, mobile SMB employees have an "always connected" inbox that serves as a central clearinghouse for communications to and from virtually everyone in their workflow. In many cases, wireless e-mail users can even retrieve and edit business documents and multimedia content sent as attachments.

Mobile e-mail may be in itself a justification for wireless investment, but it's just the beginning of the mobile computing story. EACS has gone well past the wireless e-mail stage and is now a showcase for the full spectrum of wireless SMB computing applications. When EACS employees hit the road, they have real-time wide-area wireless access to the company's CRM system, customer database, Microsoft Outlook system, group scheduling and tasking information, shared contact lists and other key resources.

Throughout the business day, EACS office administrators put scheduling, contact information and travel instructions into a central Microsoft Outlook calendar that field engineers access with wireless devices, adjusting their itineraries as schedules change throughout the day.

The EACS sales staff also benefits greatly from wireless computing because they have wireless real-time access to the company's customer database and backoffice systems.

## A CMP Guide

**Business-Critical PCs for SMBs: The CMP article series and online knowledge site.** In this series we look at a key set of evaluation criteria that can improve the outcome of the PC selection process for desktops, notebooks, tablets and Pocket PCs. In coming months, the remaining article in the series will in turn focus on usability aspects of business-critical PCs. This print-and-online special project, sponsored by Hewlett-Packard and Microsoft, is supported by a major research study conducted by Roper/NOP, and a custom Web site located at:

[www.businesscriticalpcs.com](http://www.businesscriticalpcs.com)

EACS' senior infrastructure consultant Ray Stewart explains: "Our salespeople can in some cases query all the needed information sources via wireless and create a completed proposal or quote before they even leave the customer site!" And here's the best part: The EACS wireless infrastructure is mostly achieved with cost-effective "off-the-shelf" IT products that don't cost a fortune to purchase or deploy, including Citrix Metaframe, Microsoft Windows XP Professional and Windows 2000 Server. Due to the business-critical nature of its wireless applications, EACS uses a combination of HP Compaq business notebook PCs and iPAQ Pocket PCs for higher reliability, usability and stable platform designs.

## WIRELESS DATABASE

Wireless is a great productivity boost for traveling SMB workers, but it's just as important for SMBs in storefronts, hotels, industrial sites and other fixed business locations. The Bandi & Luni's bookstore in Seoul is an excellent example of how wireless LANs can directly improve customer service levels and profitability. Bandi & Luni's is a large retail book space with about 2 million books in inventory. To create a more efficient and pleasurable shopping experience, Bandi

& Luni's staff use HP iPAQ Pocket PCs to query the book inventory database as they walk around the store. The iPAQ's large screen and easy-to-use, Windows-style interface lets staff members help customers by quickly detecting whether a book is in stock and where a book is located in the store. Jong-hwa Kim, director of Bandi & Luni's parent company, Seoul Book Center, sums up the business advantage: "The customer who finds a book using the PDA search system buys the book almost without fail, which contributes considerably to sales revenue increases."

Staff workload is also decreased by a barcode-reading system that lets staff enter books into the store's IT systems using iPAQs during the stocking and re-shelving processes. Bandi & Luni's managers estimate that they can run the shop with a half to one-third the staff required in other large book centers. Bandi & Luni's is not alone in terms of SMB use of wireless database access applications. In research for this article, we found that restaurants, medical offices, hotels, educational organizations, retailers, manufacturers and financial organizations all over the world are using wireless LANs and WANS to access backoffice systems and business-critical database information.

## WIRELESS MULTIMEDIA

Although it sounds a bit futuristic, wireless multimedia applications are already delivering real business advantages to SMBs. Consider the case of Argo Turboserve Corp. (ATC), a New Jersey-based aerospace and nuclear turbine engine parts distributor with about 90 employees. Art Johnston, ATC's CIO, is managing a project that will give ATC staff wireless WAN access to real-time customer and product information that resides in CRM and ERP services stored on an Axapta, Microsoft Business Solution server.



*Art Johnston,  
CIO,  
Argo Turboserve Corp.*

In the process of setting up his wireless infrastructure, Johnston found that he could also solve a recurring human resources (HR) challenge that many SMBs face today.

ATC has satellite offices where job interviews are periodically conducted, requiring HR staff to make time-consuming trips to meet job candidates. Johnston has found that with wireless, he can reduce travel expenses by giving HR staff in the central office the ability to interview job candidates who are in a remote office via a wireless videolink. Job candidates sit in front of an HP business notebook computer outfitted with a webcam and a wireless PC card. A two-way, full-motion videolink is provided with the notebook's native Windows multimedia and messaging system. According to Johnston, the efficiencies of this approach are quite remarkable. He says: "We calculated that the savings were \$8,000 for the first two months that the video interview application was live."

## BUSINESS-CRITICAL TECHNOLOGIES FOR WIRELESS

When deployed properly, today's wireless security is good and getting better all the time. The virtual private network (VPN) and personal firewall built into Microsoft



*Jong-hwa Kim,  
Director of Seoul Book Center Co. Ltd.*

Windows XP Professional protects notebook and tablet PCs on public wireless networks, and there are similar protections built into Windows Mobile for Pocket PC software. HP, Microsoft and others in the industry are embracing the new Wi-Fi Protected Access (WPA) standard, which provides powerful next-generation data-encryption support for wireless network traffic on public nets.

Beyond security, another mobility issue is battery life. Ray Stewart at EACS likes the power conservation features of Microsoft Windows XP Professional and says: "Windows XP Pro's battery conservation is very useful, considering how key battery life is to the provisioning of a mobile solution." Battery life may sound like a routine detail, but research for this article found that it is the single largest networking and mobility issue for the 3000 IT pros we surveyed around the world (see chart).

In addition to its battery-saving features, Microsoft has made improvements in Windows XP Professional that deliver a wide range of benefits to SMBs in critical mobility scenarios. SMBs can use the wireless auto-configuration features in Windows XP

Professional to move among work, home, coffee shops, airports, hotels, restaurants and other public spaces while remaining connected at high speeds. This level of mobility, network roaming and wireless support, combined with device-synchronization and power-management capability, make Windows XP Professional a must-have tool for the SMB notebook and tablet PC users on the go.

## JOINING THE WIRELESS ERA

Clearly, a wide range of wireless mobility applications benefit SMBs. So the remaining question is: How does an SMB with limited IT resources design and deploy wireless applications? Ray Stewart, the technology guru at IT solutions provider EACS, tells how his company found itself in the wireless infrastructure business: "In some cases our customers may be interested in hosting their own wireless services in-house, but increasingly we are hosting the wireless applications servers on behalf of our customers in our own facility."

SMBs can also get help from a wide range of national and international wireless operators and network service providers, who in many cases will provide both the wireless connection and the e-mail, calendar and contact management hosting. And, when large wireless operators team up with specialized backend applications providers, SMBs can get wireless connectivity, productivity applications, e-mail and database-driven CRM and ERP applications in a single package.

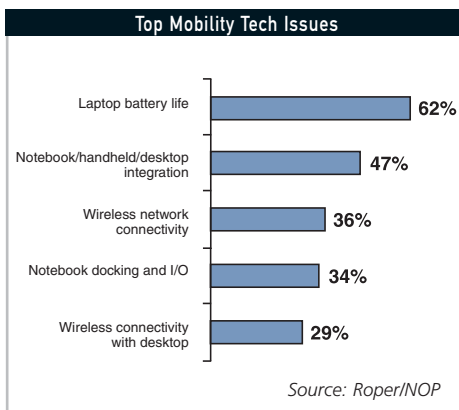
There are literally thousands of wire-

less and mobility applications and solutions providers around the world, and the list is growing all the time. HP maintains a global database of many of these resources, which can be accessed in HP's "developer & solution partner" program (DSPP) Web site at: [www.hp.com/dspp](http://www.hp.com/dspp). Look for the "View Partner Information" section, where you can enter your geographical area and a target technology. Whether you use a local VAR or a national network service provider or do it yourself, wireless computing is too important to put off. ♦

*Steve King is a London-based technology consultant who has deployed PCs and IT systems for more than 100 government agencies, universities and companies.*

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