Making the Case for Wireless Mobility Investment

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Mobile COMPETENCY

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Topic Area
Return on Investment - Wireless Mobility

Problem Definition
Can enterprises achieve a positive return on their investment in handheld/wireless technologies?

Summary
Mobility investments warrant serious consideration. Early technical and financial hurdles have been largely overcome.

Mobility Benefits:
- support growth strategies
- reduce paperwork
- shrink cycle times
- enhance customer satisfaction
- improve internal communication
- increase productivity
- deliver time savings
- improve accuracy

During the most recent economic downturn, companies have focused intensely on cost-cutting and expense reduction to weather the storm. Price erosion, increased competition in stagnant markets, and relentless scrutiny of corporate performance metrics by investors, among other factors, has intensified cost-control efforts.

Against this backdrop, corporate leaders must seek out and capitalize on strategies that will improve enterprise performance while also providing a short-term return on investment (ROI). At the same time, smart companies are investing wisely *now* in growth strategies that will distance them from the competition once the economy rebounds. Wireless mobility can help.

Armed with intelligent handheld devices, mobile employees can reduce paperwork and shrink business process cycle times, reducing overall labor requirements or freeing up valuable time for more productive, profitable activities. Mobility also improves communication and customer satisfaction.

Memphis, Tenn.-based Fedex Corp. has realized these and other benefits for more than a decade and is continually optimizing its approach to leverage new technology. This past fall, FedEx began converting from industrial custom devices to more versatile and flexible handheld terminals based on the Pocket PC operating system. Each of its 40,000 drivers will ultimately be equipped with these devices. The FedEx PowerPad operates across the AT&T Wireless Services general packet radio services (GPRS) network and incorporates Bluetooth technology as well as a built-in 802.11b wireless LAN system for communication between the driver, the truck and the home office. This solution maximizes FedEx's current wireless investment and positions it to use complementary wireless solutions as they become available.

Many other enterprises have avoided investments in wireless mobility to date due to early technical hurdles. These hurdles have been largely overcome, and wireless mobility strategies now warrant serious consideration. Intelligent handheld devices perform better and provide more sophisticated capabilities than previous versions, enabling users to securely access,

transmit, and manipulate essential information on the fly. Concurrent with improvements to the devices, wireless networks have matured, providing users with greater bandwidth and more reliable connectivity than in the past.

The financial case for investments in mobile strategies can withstand intense scrutiny by the Finance Department. CFOs, who have reigned in the free-wheeling spending of the 1990s, today demand clear justification for every investment. When presenting the case for wireless mobility, enterprise planners must assess and present the *total* financial impact. This includes both total cost of ownership (TCO) and traditional ROI analyses.

Total Cost of Ownership. When assessing the TCO of a mobile solution, it is important to optimize the investment in each of four areas:

Capital Investment. Standardize offerings, wherever possible, both to maximize negotiated discounts for equipment and services and to lower ongoing support costs. Even in cases where the initial investment in equipment and software is higher (perhaps because existing equipment is being replaced), overall deployment costs will likely be lower if standardization strategies are applied.

End-User Operations: Productivity is the critical factor to consider here. Consider the financial impact of a mere 1% increase in user productivity. Assuming a $40 per hour, fully burdened cost of an employee working 2,000 hours per year, a 1,000-employee organization could realize $800,000 in savings from a 1% productivity improvement. An organization with 10,000 employees may see a bottom-line improvement of $8 million through a workforce reduction or deferred hiring requirements. The same is true with respect to IT operational productivity; even a 1% improvement in operational efficiency can noticeably affect financial performance.

Significant financial benefits may also accrue simply from redirecting time saved to more profitable work. A 1% increase in sales productivity means an additional 20 hours in customer face time per year, per sales person. If each sales person closes even one more sale per year, this potentially equates to millions in additional revenue. For The Pepsi Bottling Group (PBG), the ability of 6,000 sales reps to use the limited time that they have at each store to close new sales has been greatly enhanced by a new "smart selling application" delivered on lightweight industrial handheld Pocket PCs from Symbol. PBG's primary goal is to drive customer revenue. The application provides reps with "prompts" to promote upselling and cross selling and arms reps with information to reduce out-of-stocks and better forecast demand.

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Technical Support. Although moving toward a wireless-enabled workforce may increase the overall complexity of the IT infrastructure, implementing a standardized device and applications platform can mitigate this effect. When standards are enforced, the overall mean time between failures (MTBF) for devices will increase, while the mean time to recovery (MTTR) from those failures will decrease. This will improve the overall efficiency of IT while improving overall user productivity and satisfaction. Supporting a common platform also facilitates user training, applications distribution, and even device refresh, resulting in a more controlled change management process. In fact, deploying standardized mobile platforms, as opposed to traditional ad-hoc implementations, can reduce overall technical support costs by as much as 18% annually.

Administration. While short-term TCO benefits can be attained by managing acquisition costs and realizing productivity gains, overall administrative benefits represent continuous savings over time. In the case of remotely deployed mobile applications, these savings can come in the form of improved process efficiencies and automation, decreased errors, and reduced training times.

Return on Investment. ROI analysis helps predict how quickly a solution will return value to the enterprise. ROI calculations are numerous and varied. Some assumptions are fairly predictable, while others may be more difficult to assess absent specific-use cases. Following are some business benefits that may be used as the basis for a mobile ROI calculation.

Improved Efficiency. Often a return can be realized simply by speeding up a specific application or task. K-rauta, a Swedish provider of hardware and building supplies with 10 large warehouse stores, has equipped its employees with Pocket PCs for access to its ERP system. Staff can now perform stock checks, pricing, and data input from anywhere in the store. As a result, check-in, inventory and stocktaking process times have been reduced by 50%. K-rauta has reduced the time spent walking back and forth from desk terminals to shelves by 70%. Employees no longer input data manually, thus saving time and increasing accuracy. Total time savings per year are estimated at up to 4,050 staff hours, which translates to €64,800 ($72,985) in cost savings. Due to these benefits, K-rauta achieved an ROI in less than six months per store.

GMAC Commercial Mortgage reduced the time it took to process commercial loans from 90-120 days to 10 days or less. The project involved converting a serial paper-based process to parallel tasks supported by electronic forms on a Pocket PC. It was completed in three months by three people.

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Improved Effectiveness. The effectiveness of field personnel can be significantly improved. Consultants at Cap Gemini Ernst & Young (CGE&Y) UK needed to access key information such as email, calendars, and contact data. Using a combination of laptops with landline modems was cumbersome and unreliable. This spring, CGE&Y UK began piloting XDA Pocket PCs with GPRS communications and a secure Access Point Node communications channel direct into its corporate network. (The solution also fits well with HP iPAQs with GPRS-enabled mobile phones already in use; this worked well for those who didn't want to carry a separate Pocket PC and mobile phone.) Early results are promising. Data synchronization is easy and reliable and has increased staff productivity tremendously. Users no longer spend time looking for network hook ups, thanks to always-on wireless capability. 85% of users are satisfied with the system, and 70% spend an hour or more per day using their Pocket PC for email, contact, and calendar information. The system is also cost-effective due to the use of GPRS, which charges for data exchange only, as opposed to a combination of global system for mobile (GSM) wireless technology and landlines.

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Security Concerns. Highly secure organizations will likely want to own the device and lock it down. Symbol Technologies and Odyssey Software offer a policy management facility that controls which applications users may access. Less stringent organizations may allow the user to own and modify the device. However, a highly standardized, enterprise-owned, locked down device is the most cost-effective to support. Additional security considerations include data encryption and centralized management of security settings. F-Secure and Trust Digital, two software vendors, offer solutions to assist here. Authentication mechanisms embedded into Windows-powered mobile devices, including the fingerprint reader available in the HP 5400 iPAQ Pocket PC, offer yet another layer of security.

Conclusion: Mobile investments make sound business sense when analyzed through the lens of TCO or ROI. They also support both short- and long-term goals, from improving productivity to growing revenue. Creating a consistent set of corporate mobility standards (product, platform, application, processes) is critical to financial success. Corporate environments that have standardized on Windows-based servers and development tools can attain significant productivity gains and reduce operational costs by implementing solutions on Windows-based Pocket PCs. Developer and end user training time as well as architecture integration issues can also be dramatically reduced, further enhancing ROI.