

Techsplanation: Capturing Data Efficiently

By Alana Okun

Flexible mobile computers and scanners improve inventory tasks.

Mobile computers enable retail workers to more efficiently complete tasks, such as real-time inventory and shelf replenishment, resulting in more smoothly running stores and receiving areas. Data capture technology is all about flexibility. As new transaction methods are introduced and standards organizations introduce new bar codes, the technologies must be able to adapt to the future.

New Hampshire State Liquor Commission (NHSLC), for example, has implemented advanced data capture tools to help complete mandated in-store inventory counts and track more than 36 million bottles of alcohol at 75 stores across New Hampshire. NHSLC needed to reduce inventory processing times, eliminate the potential for user errors and find a way to adequately track damaged goods. "The bar code scanners that were used in the past not only became obsolete, but required constant upkeep and maintenance," says Peter Engel, director of store operations for the NHSLC.

After an extensive evaluation, NHSLC selected Dolphin mobile computers from Hand Held Products. The mobile computers coupled with Data Capture Solutions' customization services has helped modernize the state's liquor inventory program to track damaged goods. The use of the Dolphin 9500 has enabled NHSLC employees to reduce inventory process times while preventing human error rates.

7-Eleven also implemented mobile computers to improve productivity and merchandise management across its chain of 5,300 convenience stores nationwide. The retailer is using the Symbol MC3000 to improve the mobile management of thousands of products that regularly move through its stores. 7-Eleven deployed Symbol's Microsoft Windows CE.NET mobile system to handle merchandise inventory, price verification and shipping and receiving applications.

Omni-Directional Imaging

PSC's Magellan 1000i imaging-based presentation scanner is designed for convenience stores, drug stores, specialty stores and other medium volume checkout environments. The device is able to capture hard-to-read bar codes in nearly any orientation and supports both presentation and sweep scanning styles. It offers an optional targeted scanning mode for scanning close proximity bar codes like those on a pick list. Features such as new code symbologies or new decoders can be added via software updates. The multi-interface support built into each scanner allows a new interface with a program parameter change and a cable switch.

Bluetooth Mobility

Symbol's MC3000 family of mobile computers feature one-dimensional (1D) laser and 2D image scanning, color display, batch or wireless communications, a gun form factor, Bluetooth and audio capability, and three keypad options. The mobile computers are based on a mobile Intel XScale PXA270 processor supporting 64MB of RAM. The Microsoft Windows CE operating system offers familiar interfaces and the power of Web-based applications. The devices offer rugged design and IP54-rated protection against dust, moisture and extreme temperatures. The MC3000s have a drop spec of four feet to concrete across a wide temperature range.

Convertible Computer

The Intermec CN30 mobile computer is powered by Microsoft Windows Mobile 5.0 and Intel PXA 27x processor. It is convertible between pen notepad-style and key-based mobile computing. The device offers durability through industrial-level protection against repeated drops, dirt, and water and temperature extremes. The 480 x 640 (full VGA) display offers enough resolution to provide four times the content of conventional quarter VGA displays so

that Web-based applications are more portable. The device also features one-touch backlight access and user selected light control. It includes Intermec's EV15 linear imager, which uses Active Pixel Sensor (APS) technology. High performance and secure wireless communications are enabled through a Wi-Fi certified radio, support for 802.1x standards and compatibility with Cisco networks.

Image Kiosk

The Hand Held Products 8560 mini-kiosk features a small footprint and is driven by the Windows CE 5.0 platform. Hand Held Products' Adaptus Imaging Technology reads linear and 2D bar codes at any angle. The device offers finger-touch navigation and an ergonomic and durable design. RMS-Touch technology enables price checking, item locator, loyalty card administration and a deli pre-ordering system. The RMS-Kiosk application can estimate wait time and send SMS messages to customers' cell phones when their orders are ready.

Linear Barcode Imager

Denso's BHT-200 linear barcode imager series is based on Windows CE.NET technology and offers additional protection for the display and long battery life. The devices are 802.11b wireless compatible and can run applications in real time. They handle emulation, device management and wireless network printing. The series uses the Denso CCD imager as its scan engine and features a laser scan marker and vibration. The series also is available in a 2D code imager model and is available with a 10-key and 32-key configuration.