

# Leave your car in safe hands

A look at how Bluetooth technology is optimizing mobile asset tracking applications, allowing valet service providers to streamline their operations

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**M**obile scanning solutions are making a real difference to those companies whose business success depends on tracking assets and managing large inventories. Wireless barcode scanners and RFID readers enable companies to streamline their operating efficiency, enhance customer service, and ultimately improve the bottom line.

## The valet service sector

Have you ever felt anxious handing your keys over to a young valet that races around parking and retrieving cars? Or worse, have you ever been struck by panic as the valet shows you key after key that is not yours? Efficient inventory management is never more important than in the fluid inventory of expensive assets. To increase efficiency, improve customer service, and reduce error and liability, Automated Valet Parking

Manager (AVPM), specialists in all aspects of valet and self-parking, have created the first and only valet parking application to track, monitor, and manage vehicles, valet keys, tickets, employees, payroll and revenue in a single system. The AVPM ProDoor system, which utilizes Bluetooth



Baracoda Roadrunners barcode scanners, is designed to provide the company's customers with a more effective way of running their valet parking operations, preventing the loss of vehicles and keys, as well as cutting the costs associated with bogus damage claims and the over-compensation of employees. Barcoded tickets, employee badges, Vehicle Identification Numbers and color sheets track the date and time of check-in /check-out, automobile information (make, model, year, color, and damage information) and employee data (hours worked and person servicing the vehicle), and because each scanner works like a wireless point-of-sale PC, the solution is also able to offer additional features such as remote cashiering and the ability to request vehicles.

### The benefits of wireless barcode scanners

A Bluetooth wireless barcode scanner holds several advantages over the industry alternative of a regular PDA. Greater accuracy and speed are the most significant of these because as well as increasing the possibility of error, manually typing an entry into a handheld device also takes longer than simply capturing information with a barcode scanner. Choosing a wireless barcode scanner has also enabled AVPM to provide its customers with

a solution at a lower cost and with better usability and scanning capabilities. By not relying on manual entry - and thus increasing accuracy while capturing information instantly - valet parking operators are able to streamline their processes and provide a faster and more efficient service.

Aside from greater efficiency in terms of usage, AVPM can provide its customers with a less expensive and less complex wireless solution. The scanner interface can run in the background of the standard operating system of any PC that has AVPM software installed. There is no need to invest in additional devices and install several licenses on each. A valet application set up on a regular PDA can cost anywhere from \$5,000 to \$12,000 per device, not including the server client application. With ProDoor, the only devices used in the mobile environment are the Baracoda RoadRunners scanners priced at less than \$1,000 (excluding the client application). When it comes to hardware, there are even more cost savings with a wireless barcode scanner. Up to seven scanners can be connected at a single time to a single host computer. While regular valet system solutions on PDAs typically offer a limited number of applications, ProDoor enables the customer to add applications to the system as and when he requires them.

For example, AVPM will soon have a "car wash" option that informs the valet which cars need to be washed.

### Improved durability and scanning

For AVPM, the optimized durability, usability, form factor and scanning capability of the Baracoda RoadRunners represented significant advantages. The Baracoda RoadRunners includes a wristband and/or belt holster with a key retractable reel enabling complete hands free-usage - essential for a parking attendant that needs to carry luggage

As well as being able to read Vehicle Identification Numbers, wireless barcode scanners allow for the tracking of vehicle check-in/out as well as employee data



and open doors. Also, thanks to its Auto Scan mode and perfect scanning capability, the Baracoda RoadRunners scanners do not require users to hold or use the trigger to scan. With this capability, a valet can welcome the customer, scan the different barcodes, and wirelessly send the request to another valet



who can then pick the right key and bring the appropriate car to the guest.

In terms of durability, protecting the screens of PDAs in a work environment such as valet parking is extremely difficult. The Baracoda RoadRunners device, however, is able to withstand drops of six foot onto concrete, making it a solution suitable for even more rugged environments. Advanced scanning capability allows workers to read barcodes through windshields in any weather,

Bluetooth wireless barcode scanners enable valet operators to provide their customers with both a faster and more efficient service



whilst the Li-ion extended battery of the scanner also allows the valet to use the scanner aggressively for several days at a time without having to recharge it.

By using scanners with Bluetooth technology, AVPM has enabled its valet business customers to take mobile data capture solutions one step further. Bluetooth technology uses ten times less power than Wi-Fi, enabling superior battery performance - critical in a mobile environment where workers are not able to continuously take the time to recharge a device. As the product uses guaranteed data acknowledgement and frequency hopping, AVPM can also ensure its customers 100% data transmissions. When a transmitting band becomes too noisy, the scanner changes bands to avoid interference. By way of comparison, Bluetooth technology uses 79 bands whilst Wi-Fi uses just three. The scanner's Bluetooth Class 1 radio allows barcodes to be transmitted up to a distance of 330 feet. For additional data integrity, should the scanner go out of the Bluetooth range (330 feet from its receiving device) for any reason, the barcodes scanned will immediately be stored inside the device (up to 10,000 UPC barcodes) with the Baracoda RoadRunners' batch mode. Once the scanner is back in Bluetooth range, it automatically reconnects itself to the receiving device and the data is down-

loaded. With Bluetooth data encryption, once the scanner is paired with its receiving device, data cannot be retrieved by any other devices, providing an additional security feature.

### The solution of choice

By utilizing Bluetooth in their scanning solutions, organizations can further distinguish themselves from the competition with a more reliable and functional system. Over the last six months, Bluetooth technology has become the solution of choice for companies looking to deploy more industrial and commercial wireless solutions. The technology is shipping at a rate of 9.5 million chips per week and is popular in all forms of mobile devices. This allows for maximum flexibility since Bluetooth-enabled scanners can connect to any Bluetooth-enabled mobile phone, PDA, laptop and/or desktop.

With mobile data capture solutions from AVPM, valet companies and their customers need worry nor stress no longer - their automobiles and employees are in safe hands. This technology, while optimized for this industry, can benefit all businesses that need to access and organize large amounts of information and inventory to reduce operating expenses and provide superior customer service. ■