EXECUTIVE SUMMARY

With retail competition at an all time high, today’s retailer must find new ways to attract consumers and inspire high levels of customer loyalty. Innovative retail mobility solutions can create a truly differentiated in-store experience with fun, interactive tools that put a wealth of information at customers’ fingertips. With an easy-to-use retail mobile computer in hand, shoppers are empowered to access a wide variety of real-time product information— including pricing, location, availability, helpful advice, targeted promotions and more — right in the aisle, without waiting for a store associate. This enhanced self-service gives customers the best of both worlds — the instant information access in an Internet-based online store and the irreplaceable tactile experience of shopping in the brick and mortar store. This white paper takes an in-depth look at these new shopping solutions, examining how this technology works, the applications it enables, the benefits you can expect and the criteria required to deploy a highly successful retail mobility solution in your retail store.
THE ISSUE: THE NEED TO DELIVER A UNIQUE IN-STORE EXPERIENCE

Differentiation in the retail store has never been more important than it is today. Consumers have more shopping options than ever before — from mass merchandisers offering one-stop discount shopping to large and respected department stores, and the convenience of the 24x7 global online market place. The increase in shopping choices results in an increase in customer demands and expectations, potentially eroding customer loyalty. Instead, consumers are defining their own shopping path on a daily basis, based on individual experience, product availability, customer service, convenience, value and price.

To succeed in this hyper-competitive environment, retailers can no longer compete on price alone. To sustain and improve profitability, retailers must focus on delivering a differentiated in-store experience that inspires a new level of customer loyalty — an experience that motivates your customers to not only return, but share their experience with family, friends and co-workers.

THE ANSWER: PUT PERSONALIZED SELF-SERVICE IN THE HANDS OF YOUR CUSTOMERS

To date, self-service implementations in a retail environment have primarily consisted of informational wall-mounted kiosks or kiosk stations, as well as self-service check out stands. With informational kiosks distributed throughout the sales floor, shoppers can get on-the-spot answers to questions as well as other helpful information. For example, a scan of an item can return the price, while guided menus can help locate a particular product — all without the assistance of a store associate.

A mobility solution designed for consumer use extends the kiosk strategy, helping brick-and-mortar stores deliver a completely new customer experience. These ‘mobile kiosks’ allow retailers to re-define self-service, moving computing power from fixed areas such as walls, shelves and checkout and placing it in the hands of your customers.

Purposefully designed to transform the consumer in-store shopping experience, a retail mobile computer empowers your customers wherever they are in the store — and more. Now, no matter what your customers need, the answers are literally right in their hands — available in seconds on a device that provides a fun, interactive shopping experience that will not only put you in a class above your competition, but also have your customers returning.

When you put a retail mobile computer in the hands of your customers, you give them the equivalent of a personal assistant for the duration of their shopping visit, an assistant capable of:

- Scanning and bagging items while they shop
- Checking price and stock availability
- Providing suggestions and special offers based on customer preferences, historical purchases, retailer objectives, or scanned items — for example, a complete menu for dinner if chicken is scanned at the meat counter, complete with coupons for a discount on some of the recipe ingredients
- Creating a gift registry in an easy, interactive and fun way
- Faster checkout at the completion of shopping

…and more.

Zebra’s MC17 Retail Mobile Computer
RETAIL MOBILITY: A WORLD OF NEW APPLICATIONS FOR A NEW LEVEL OF SERVICE

First — what exactly is a retail mobile computer? A retail mobile computer is a two-in-one easy-to-use device designed to provide the computing power your customers need to get the answers they want, as well as the tools your workers need to improve efficiency and productivity. Through a connection to a wireless LAN, the device provides:

• Real-time access to back end pricing and inventory systems
• True one-to-one customized direct electronic marketing programs executed in real time directly to the customers shopping in the aisles of your store, enabling the delivery of daily or weekly special offers and discounts — or on the purchasing history of your customers.

Customer facing applications re-define the customer experience...and satisfaction levels

Retail mobile computers provide greater convenience and value for your shoppers through a wide range of customer-friendly applications, including:

• Mobile self-scanning: Customers can scan items as they shop, providing instantaneous price verification, as well as a running total for all their basket items. The ability to scan and bag selected items while walking through the store gives shoppers the power to eliminate long waits at the checkout stand — even during the busiest times. With items already pre-scanned, customers can simply present their final total to a cashier or self-service kiosk, make payment and be on their way in minutes, addressing the ‘get in and get out’ shopping mentality of many of today’s consumers.

• Gift registry creation: A retail mobile computer allows shoppers to simply point and scan to create gift registries and wish lists — a process so simple...
that even children can easily create a wish list for a birthday or other event. The rich high-resolution color display allows for easy selection review as well as the opportunity to present suggestions for complementary products, improving cross-selling efforts and increasing sales opportunities. Upon completion of the list, shoppers can wirelessly send their registry to a store printer at the press of a button for a printed record of their ‘wish list’.

- **Product information:** With a retail mobile computer in hand, shoppers enjoy the equivalent of a mobile kiosk, with convenient access to a wide range of information that is always at their fingertips. A quick scan of a product bar code or shelf tag can provide inventory availability, detailed product information and specifications — all without having to track down a store associate.

- **Targeted recommendations and real-time customer loyalty programs:** Upon entering the store, a quick scan of a loyalty card allows you to electronically greet customers with a personalized special offer based on buying history. And when your customers scan items that are selected as they move through the store, you have the unique real-time visibility into pending purchases required to take advantage of cross-selling opportunities in real time, increasing basket size and sales. The result is 1-to-1 marketing programs that allow retailers and manufacturers to connect with shoppers at a more intimate level — improving the success of targeted marketing efforts.

**Associate facing applications re-define associate productivity levels**

The same mobile device that enables a new level of customer service also supports applications that can improve employee productivity and store efficiencies, including:

- **Information lookup:** Using a retail mobile computer, store employees can instantly confirm pricing, check inventory levels and find a product location — providing prompt, personal service for those customers who prefer to speak to an associate.

- **Shelf replenishment:** By using a retail mobile computer to scan a shelf tag on an empty shelf, a store employee can quickly determine if inventory is available and where it is located to enable rapid replenishment of shelves — helping to ensure the right product is available at the right time to prevent lost sales and lost customer satisfaction.

- **Product put-away:** A quick scan of returned items automatically provides the proper warehouse or sales floor location for efficient put-away, ensuring the inventory accuracy and availability required to prevent lost sales.

- **Line busting:** During peak shopping hours, employees can pre-scan items in the basket while customers are waiting in line, allowing retailers to pro-actively reduce long wait times and improve customer service levels — without the need for additional fixed POS lanes that can take away valuable merchandising space in your store.

The same retail mobile device that enables a wide variety of customer-facing applications also supports applications that can improve employee productivity and store efficiencies — streamlining product put-away, replenishment and more.
BENEFITS FOR THE CUSTOMER...
AND THE RETAILER

Today’s retail mobility solutions can provide a true service differentiator, bringing a world of benefits to customers and retailers alike.

This new technology allows your customers to truly make the most of each visit — maximizing time spent in the store as well as the value of each visit. With a retail mobile computer in hand, your customers will not only have more fun shopping, they'll enjoy a one-of-a-kind experience, with an ‘electronic’ version of an associate always at their fingertips — providing the ultimate in customer service. In addition, the ability to receive real-time offers on items they frequently purchase, items that are in the basket as well as complementary items helps customers save money, driving your perceived value even higher.

For retailers, the improvement in service levels leads to greater customer satisfaction and retention, while the improvement in marketing capabilities can greatly increase sales. Real-time visibility into consumer buying patterns enables the delivery of real-time highly targeted one-to-one marketing promotions right to the point of decision — the shelf edge. The delivery of relevant offers based on items in the basket enables on the spot cross selling that helps increase basket size and revenue per customer visit. For example, in a grocery store, a scan of a head of lettuce could return coupons for salad dressings on sale — or expectant parents creating a gift registry can be presented with complementary products as items are selected. In addition, the collection of granular customer intelligence enables retailers to better understand buying behaviors — and brand preferences. Retailers can present shoppers with all available coupons and in-store specials based on preferred brands, strengthening your relationship with customers as well as manufacturers — your perceived value with customers is increased, and manufacturers enjoy increased sales and brand presence. Finally, the ability to improve employee efficiency increases staff utilization, helping control operational costs. The result is an excellent return on investment — the retailer can leverage a single tool to improve customer service and sales as well as employee productivity.

SELECTING THE RIGHT RETAIL MOBILE COMPUTING SOLUTION

Retail mobile computing solutions are not created equal, and a variety of criteria should be carefully considered to ensure the selection of a successful retail mobile solution that will provide a rapid rate of adoption by customers — and a rapid return on investment.

Customer facing criteria
The challenge in defining criteria for these customer-facing solutions is the likely wide variety of demographics in your customer base — from young to old, with varying levels of comfort with technology. While some of your customers will be very tech savvy, others may be doubtful of the positive experience that a retail mobile solution can bring. Usability is key. A positive experience with a reliable solution is critical to customer satisfaction, solution adoption, and overall success.

By using comprehensive selection criteria, you can confidently provide your customers with a device that will feel even more comfortable to use than the average television remote control. Key consideration factors which will ensure the selection of the device that will best address your broad demographics include:

Ergonomics
One of the most crucial criteria from the customer’s perspective is the actual design of the device. The device should be physically attractive and appealing, lightweight and easy to hold, and designed from the ground up specifically for consumer use. Questions to consider include:

• Is the device designed specifically for consumer use, or is it a repurposed employee tool?
• Can the mobile device be held comfortably in one hand — regardless of whether that hand happens to be large or small?
• Can the device be carried easily for extended periods of time? For example, can a shopper hold the mobile computer during an extended grocery shopping trip or while creating a gift registry with minimal fatigue?
• Are all buttons easily accessible for right and left-handed users?
• Can the average shopper perform key functions — such as scanning an item — with just one hand? Well-designed devices that can be used easily with one hand will help to ensure a positive experience and increase adoption.

**Ease of use**
From the moment a customer picks up a retail mobile computer, the interface should be as simple and as easy to use as possible — highly intuitive like an ATM banking kiosk. The device should offer a hardware design that supports customer interaction, with all buttons well placed and visible, as well as a software architecture that allows the development of highly visual and easy-to-navigate applications — no familiarization period required.

**Durability**
While your retail mobile computer should have the styling and simplicity of a consumer device, in order to endure life in the retail store, it must also have the field-tested durability of an enterprise-class solution. Throughout the day, the device will inevitably be subjected to bumps and drops. To ensure a low total cost of ownership, the durability specifications of the retail mobile device need to match the needs of your environment. Questions to ask include:

- What type of flooring surface is in your store? Do the devices need to be rated for drops to tile or drops to concrete?
- What are the temperatures in your environment? Do you have outdoor areas where the retail mobile device might be utilized? If so, you’ll need to check the operating temperature specification to make sure it includes the temperature range required.

And since even the most durable devices require a maintenance plan and support strategy, it’s essential to consider available services. As customers become familiar and rely on these devices, reliable uptime positively reflects on your store and brand. A best-in-class service plan with rapid turnaround times and instant access to technical support can help ensure maximum device uptime.

**Scanning technology**
Bar code scanning technology is one of the most critical device features — this is the data capture activity your customers will be routinely performing with the device in the aisles of your store. The retail mobile computer you select should offer extraordinary scanning performance. All scan engines are not created equally — to enable first-time, every-time capture of bar codes by young and old alike, look for:

- The ability to read all 1D bar codes, including GS1 Databar, providing retailers with the flexibility to bar code very small and hard-to-label products as well as produce, variable weight products and even coupons to support more complex promotional programs.
- Sophisticated decoding software algorithms that enable the accurate first time capture of hard-to-read, damaged or dirty bar code labels
- A bright scan line for easier scanning
- An audible signal that alerts customers that a scan was successful — loud enough to be easily heard in a busy retail store

A successful retail mobile device should be easy enough for a child to use — this technology can help set you apart from the competition and have your customers (and their children) looking forward to each visit.
Battery
Your solution’s battery should offer maximum cycle times to ensure continuous operation for extended periods of time. Battery life and charging times can have a significant impact on the success of your project. A device that powers up and stays on throughout its use will delight your customers and secure a positive perception of the solution.

Display
A bright color display enables the delivery of a wealth of valuable content to your shoppers — from daily specials to exclusive offers, suggested recipes or the latest new products. In order to optimize the user experience, the device should be easy to read in a wide range of lighting conditions and offer the resolution required to support text and rich media. Evaluate the lighting environments throughout your store to determine if your devices should have backlighting. And ensure that the device display is capable of providing text that is clearly legible and easy to read for all customers.

IT-centric device criteria
In addition to considering the customer experience, you also need to factor in a wide range of technology criteria directly related to the retail mobile computers:

Manageability
Retail mobile devices are always on the move throughout the store — challenging to manage, track and monitor. Without centralized and remote management of mobile devices, spiraling management costs can significantly erode the benefits of your retail mobility solution. Conducting simple tasks, such as initial staging of devices, updating devices with a software patch or new application, or modifying the device configuration can take days in a single large store and weeks or even months in an operation with geographically dispersed multiple store locations. In the event of a minor device malfunction, hands-on interaction within the IT department is required, removing the device from service — and increasing the total cost of ownership (TCO).

Make sure the solution you choose offers centralized and remote management of the retail mobile devices — a critical component in the most successful retail mobility solutions. Look for robust lifecycle management capability that enables remote staging and ongoing provisioning as well as the ability to monitor devices and correct many device-related issues — all without the need for your IT department to have the device in hand. With this functionality, the time and cost associated with management of the retail mobile devices will be minimized; all devices will consistently receive the latest upgrades in a timely fashion, protecting device performance; and software issues can be resolved right with minimal effort. The result is maximum uptime, protecting the customer experience as well as your TCO.

Security
Securing your customers’ personal data is an absolute requirement in the retail industry, governed by strict Payment Card Industry (PCI) and other regulations. Lack of compliance can result in costly fines and loss of credit card processing privileges, lawsuits from banks and customers, brand damage and the high cost of the loss of consumer trust. Your entire mobility solution, including the WLAN infrastructure, should offer the security required to ensure PCI compliance — from the latest authentication and encryption standards to built-in, around-the-clock protection against unauthorized access, network attacks and rogue access points and devices.

Deployment ease
To gain maximum value from your retail mobility tools, your solution should offer the right environment for easy application development as well as easy integration with your existing applications — from pricing and inventory databases to CRM applications and loyalty programs. An open standards-based architecture and a familiar set of development tools and operating systems will enable the cost-effective rapid development and deployment of highly customized robust applications — including 1-to-1 marketing applications, price lookup and store associate productivity applications.
**Bandwidth**

The applications you need to enable will likely include access to large database-driven applications as well as applications that are rich with multimedia. To support these applications, both your mobile devices and network infrastructure should offer comprehensive 802.11 a/b/g WLAN support, enabling the segmentation of the WLAN to ensure that your customers have access to the required bandwidth.

**IT-centric WLAN criteria**

The mobile computers that your customers hold in their hands are only half of this mobility solution. The other half is the network that is at the heart of any retail mobility solution — the wireless LAN. The WLAN must provide your customers with a high-performance non-pervasive wireless connection as they move through your retail store.

In order to ensure success of your retail mobility solution, the wireless LAN you choose must provide:

- A feature set that delivers unprecedented uptime and wireless performance to protect the success of your retail mobility solution. Just a few of the many capabilities to evaluate include:
  - Seamless roaming: Can customers roam freely without experiencing connection issues?
  - Quality of Service: Can you consistently control service quality and deliver ‘wired-like’ speed and reliability?
  - Self-healing: In the event of a malfunction in a piece of equipment in the wireless infrastructure, is your entire network affected, or can the WLAN automatically adapt to ensure service continuity?

- The ability to easily and remotely manage the WLAN infrastructure, enabling your IT staff to instantly detect and resolve any issues that could impact performance levels.

- Around the clock security to protect the network against attacks and other threats to prevent a costly security breach, prevent unplanned network downtime and ensure PCI compliance.

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**THE MC17 RETAIL MOBILE COMPUTER**

Our MC17 Retail Mobile Computer solution is designed to provide retailers with the best of both worlds — a diverse tool that enables revolutionary customer service excellence — and associate productivity. The MC17 reflects the knowledge gained from deploying mobility solutions in many of the world’s retailers – from large to small, offering all the features and functions required to maximize the success of this enterprise investment.
SUMMARY — A NEW SOLUTION WITH A STRONG ROI

Today’s retail challenges require a fresh approach—a new way of thinking. Today’s retail mobile solutions meet that challenge — and deliver substantial benefits for customer and retailer alike. An innovative retail mobility solution will allow you to make a positive impression with your customers and set your retail store apart from the crowd. Your customers will enjoy the best of both online and in-store shopping — access to instant information to help define their own shopping path inside your store and the irreplaceable tactile experience of shopping in a physical store.

While your customers enjoy real-time access to services that provide real value, the retailer enjoys the ability to greatly enrich both the customer relationship marketing (CRM) database and marketing efforts. Visibility into historical purchases as well as real-time selection of items in the store enables the extension of real-time relevant offers right at the point of decision — inside your retail store. As a result, horizontal marketing programs are replaced by highly targeted real-time 1-to-1 vertical marketing programs — improving basket size and sales.

And the same customer-facing device can be utilized to improve the efficiency and effectiveness of your store employees. They have the information they need to answer customer questions as well as execute crucial tasks more rapidly, from shelf replenishment to pricing audits.

The result is an outstanding return on investment: improved customer retention, improved overall store productivity, increased profitability and stronger competitive positioning.

FOR MORE INFORMATION

For more information on how your enterprise can benefit from retail mobility solutions, please visit us on the web at www.zebra.com/mc17 or access our global contact directory at www.zebra.com/contact.
ABOUT ZEBRA

Zebra Technologies Corporation is a global leader respected for innovation and reliability. Zebra offers an extensive range of asset-tracking technologies incorporating mobile computing, data capture, barcode, wireless LAN, RFID, location systems and Zatar™, the cloud-based Internet of Things (IoT) platform. These technologies make businesses as smart and connected as the world we live in. Zebra’s tracking and visibility solutions transform the physical to digital, creating the data streams businesses need in order to simplify operations, know more about their business, and empower their mobile workforce.

Zebra’s products and solutions are used around the world by industries including healthcare, retail, transportation and logistics, manufacturing and sports—for a variety of applications from improving patient safety; to eliminating checkout lines with mobile devices; to streamlining warehouse operations and adding a new dimension to professional sports and entertainment with real-time information.