



## DATALOGIC ADC

Fast-paced and dynamic, the Automatic Identification and Data Collection industry requires commitment, innovation and adaptability to constant change.

Only state of the art solutions can satisfy the ever-demanding expectations of customers. Datalogic ADC (Automatic Data Capture) always goes one step beyond. Dedication to exceeding customer expectations has led to the development of the widest range of high performance products and solutions in the industry. This, combined with excellent service, has made Datalogic ADC a world leader for Automatic Data Capture needs.

Datalogic ADC is the market expert when it comes to providing scanning and mobile solutions for specific business needs.

Companies around the globe trust Datalogic ADC to provide reliable solutions that benefit their businesses because quality service, smooth installations and continual support are assured through our extensive Partner network. Datalogic ADC stands behind you every step of the way.

## POS CHECKOUT

Worldwide, retail stores and their point-of-sale checkouts are as diverse as the consumers they serve. However, they do share common characteristics. Retailers must accurately and reliably collect item level transaction data while continually improving the operational efficiency of the checkout. Operational efficiency translates into improving the speed of the checkout which in turn improves the consumers' shopping experience while reducing the costs associated with each item. Despite these commonalities different retail checkout environments have different requirements for collecting item level data. Checkout environments will vary based on the type of store, merchandise mixes, cultural or geographic differences, and consumer preferences.

Datalogic ADC drives continual improvement in checkout efficiency by applying new technologies, revolutionary design form factors, and new developments in software platforms to the performance and operational efficiency of data collection at the POS checkout.

## High Volume Checkout

High performance and high volume checkout environments are characterized by large numbers of checkout stands across the front of the store. These stores need the highest throughput and productivity available. They typically have large numbers of customers each day and each customer transaction contains a relatively high number of lower value items. Customers typically use shopping carts and unload these carts onto a belt or counter that brings the items to the cashier. This environment is almost exclusively characterized by cashiers who slide the items across an in-counter bar code scanner (usually a high performance bi-optic scanner). Almost all items are moved across the scanner with some exceptions being bulky or heavy items that may be scanned with an auxiliary handheld scanner connected to the primary high performance scanner.



MEMOR™ MOBILE COMPUTER

TOUCH™ BAR CODE READER

HERON™ BAR CODE READER

QUICKSCAN™ BAR CODE READERS

GRYPHON™ BAR CODE READERS

## Distributed Checkout

In-store distributed position checkout environments are characterized by checkout counters that can be found anywhere in the store. Customers typically do not use shopping carts but simply place their items on the counter beside the point-of-sale terminal. This environment is characterized by cashiers taking the scanner to the item. Depending on the checkout design a handheld scanner may be the most efficient.

## Counter Checkout

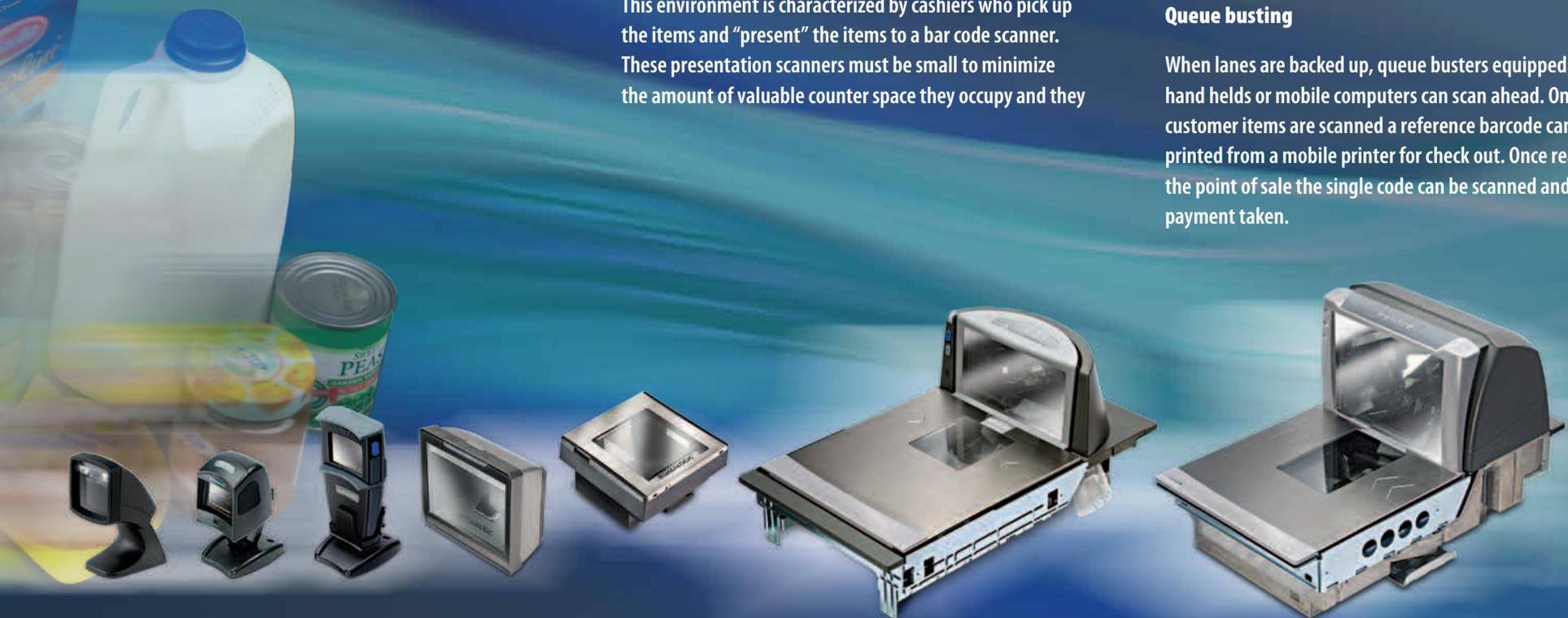
Small counter checkout environments are characterized by a small number (usually 1 to 3) of checkout counters at the front of the store. First pass read rates, the ability to read difficult labels on the first try, is critical to maximizing productivity. Customers typically have relatively few items in their transaction and these items are of medium unit price and usually small in physical size.

This environment is characterized by cashiers who pick up the items and "present" the items to a bar code scanner. These presentation scanners must be small to minimize the amount of valuable counter space they occupy and they

must be able to read the bar code at any angle (Omni-directional scanning). In many instances, these stores have some items that are heavy and/or bulky and it is easier for the checker to pick up and take the scanner to the item to be scanned. The ideal scanner for this environment is not a typical hand held scanner since the great majority of the items in the transaction set are easier to bring to the scanner and because of the need for excellent first-pass-read rates.

## Queue busting

When lanes are backed up, queue busters equipped with hand helds or mobile computers can scan ahead. Once the customer items are scanned a reference barcode can be printed from a mobile printer for check out. Once reaching the point of sale the single code can be scanned and payment taken.



## LOSS PREVENTION

An independent mystery shopping study spanning nearly 500 stores and 25 chains demonstrated that when shoppers attempted to leave a store without paying for bottom-of-basket items, they were successful 62% of the time. Bottom-of-basket items are frequently overlooked or forgotten at checkout. Many factors contribute to this problem:

- A long line of impatient shoppers
- Pressures on cashiers to increase throughput
- Distracted cashiers or customers
- Customer intent or cashier collusion

Bottom-of-basket shrink is particularly hard on a store's margins since a single bottom-of-basket item can often run \$10 or more. Just a

single loss per lane per day can drive millions of dollars of annual profit loss for a large grocery chain.

Datalogic ADC's LaneHawk™ BOB (Bottom of Basket) is a loss-prevention solution that turns bottom-of-basket losses into profits in real time. The LaneHawk BOB scanner detects and recognizes items as part of the transaction, making sure that stores get paid for their bottom-of-basket items.

The LaneHawk BOB camera system captures transaction data and bottom-of-basket images to enable thorough reporting on what is going through the checkout lanes under the cart. This reporting allows for an audit trail to deter collusion and "sweethearting," so cashiers can be held accountable.

## SELF-SHOPPING

Retailers are constantly looking for new ways to enhance the customer's shopping experience, increase customer satisfaction and assure customer loyalty.

Self-shopping provides retailers with cutting edge technology that increments sales and cuts costs, by allowing the customer to take charge of the shopping experience and have fun.

The Joya self shopping scanner is Datalogic ADC's pod used for self shopping solutions. It offers cutting-edge technology and advanced performance in an ergonomic form factor that is easy to use.

The Joya scanner is the ideal companion in the store. Information regarding various store initiatives, such as promotions and discounts can be accessed on the pod in real time by reading the barcode.

This creates a direct communication channel between the retailer and the customer. Plus, music and video may be added to create a fun shopping experience!

The Joya scanner is also an effective Proximity Marketing tool with formidable advertising media for retailer industry co-marketing, providing an additional form of retail business through the sale of advertising space.

Since its launch, the Joya scanner has been installed in some of the largest retail chains world-wide.

Shopevolution, Datalogic ADC's innovative self shopping solution makes shopping enjoyable, effortless and personalized for each customer



## MOBILE MARKETING

### Mobile Programs

Mobile marketing is the use of a mobile device (cell phone, PDA or smart phone) as a new means of marketing communication, promotion or advertising. This new form of marketing opens two-way communication channels for companies to directly engage and build trusted relationships with customers faster, better and with fewer costs than ever before. In order to implement such Mobile programs, businesses must be equipped with bar code readers that can read directly from a mobile device's highly reflective screen. Imaging-based bar code scanners are required to read mobile bar codes with the best performance.



### Mobile Couponing

In general, coupons and rebates are used to increase sales and promote Customer loyalty. Mobile couponing with full redemption capabilities has been waiting for mobile industry, and with the growing popularity of, mobile phone use for retail interaction, the mobile channel is poised to mature into the mainstream retail marketplace.

Retailers large and small are now ready to exploit the advantages of mobile enabled retail marketing.

### Mobile Ticketing

Mobile ticketing is a process where customers can order, purchase and obtain tickets from any location and at any time using a mobile device. By selecting a bar code reader that can read codes from mobile devices, business can improve ticketing services, convenience and event accessibility for customers. Additionally, guests will often experience even faster admittance with the ability to move to shorter lines, if not bypass lines altogether.

At events with little to no infrastructure, mobile computers become an efficient way to verify tickets against a database or via cellular communication with the ticket booth.



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MEMOR™ MOBILE COMPUTER

GRYPHON™ BAR CODE READERS

MAGELLAN™ BAR CODE READERS

## RETAIL IN-STORE

Retail store environments vary widely from big box to convenience formats. Store associates use automated data capture technologies to carry out a variety of inventory accountability and communications tasks. Stock counts for year-end inventory, spot checks on items with high shrink, and receiving activities require the highest possible speed and accuracy to complete the activity in the shortest possible time. Picking, put away, price verification and price adjustments require communication with the host system for associate direction. Voice communications and online resources help the associate quickly track down answers to customer questions.

### Pricing

Price changes are often required for regional pricing or other variable pricing strategies, promotional markdowns, clearance, seasonal sales, or product mix changes. Retail headquarters usually sets overall pricing, but where it really counts is in the store. For price changes to be effective, store operations must change to keep pace with changing marketing strategies. Delays and errors in implementing price markdown strategies needlessly cost retailers millions in missed sales and increased labor costs. Delays in coordinating markdown prices on the shelf and at the point-of-sale (POS) also put retailers at risk for violating shelf pricing laws and checkout fraud. Stores typically reduce their price marking costs between 25 and 40 percent by integrating price management software with mobile computing and printing operations.

### Stock Management / Inventory

Leveraging the mobile computing capability and barcode efficiency data capture, the implementation of inventory management solution has become a valuable tool for organizations looking to more efficiently manage stock.

Organizations save a significant amount in costs associated with manual inventory counts, administrative errors and reductions in inventory stock-outs.

### Assisted Sales

When a customer has a question the Datalogic ADC mobile computer becomes the associates right hand man. Browsing the company internet can provide additional product details to help answer questions and highlight cross selling opportunities ensuring the customer has everything they need.

### Gift Registry

The modern shopper is a technical savvy individual shopping in multiple channels. Using data capture devices puts the customer in control when developing a wish list for an upcoming special event. Simply browsing the store and scanning the barcodes on items of interest makes the task effortless. When friends and family visit the store or try to purchase on-line, the retailer can simply look up the wish list of suggestions.



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## WAREHOUSE

Warehouses comprise the back bone of any supply chain operations. These ubiquitous facilities can be tasked with manufacturing line replenishment or finished goods distribution. Warehouses constantly work for efficiency and accuracy improvements to optimize operations. Warehouse automated data capture technologies carry out a variety of inventory accountability and communications tasks centred on the receipt and disposition of goods.

### Distribution Centers

Distribution centers execute the core jobs of receiving, sorting, put-away, picking and shipping. These warehouses are not just stand alone facilities but are often an integral part of a company's supply chain. In these scan intensive environments, ergonomics is a key factor to device acceptance by users. Whether a hand held scanner or a mobile computer, a comfortable form factor makes the user more efficient. At the same time, warehouse environments can range from automotive plants to retail back rooms. Devices that work in these facilities need to survive daily exposures to liquids, dust and the occasional drop reducing the cost of technology replacement and lost productivity.

### 3rd Party Logistics

Third Party Logistics (3PL) providers cover the full supply chain for their customers, with both warehouse and transportation services. Given the fixed facility costs, automated data capture and mobile computers offer opportunities for the 3PL to minimize labor and transportation costs for maximum profitability. Barcode scans to confirm transactions and reduce errors, wireless communications to direct delivery routes, and voice communications for problem resolution each contribute to greater and greater 3PL efficiency.

### Picking and Staging

Ramping up for key retail periods like the holidays requires efficient picking. Tied to the warehouse management system picking applications literally happen on the fly as associates are efficiently directed down the aisles by mobile computers. Location and item scans help with error proofing so that the right product ships to the right customer. Or users can be directed by audio and provide confirmations by voice keeping hands free for picking and packing.

### Cross Docking

Minimizing the amount of moves a pallet makes leads to a more efficient environment. Cross docking actually takes the received pallet to the next container for shipping without an interim storage location. This application leverages wireless communications to direct activities in real time as forklifts shuttle pallets from incoming dock to outgoing docks. Hand held barcode scanners with a wide read range keep the forklift operator on the truck scanning both the pallet and dock tags from the cockpit



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KYMAN™ MOBILE COMPUTER



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SKORPIO™ MOBILE COMPUTER



ELF™ MOBILE COMPUTER



RHINO™ VEHICLE MOUNT TERMINAL



## PRODUCTION

Manufacturers rely on bar code systems to provide them with flexibility, reliability and efficiency in order to stay competitive and ensure a well-coordinated chain of events. As the preferred data capture solution in this industry, bar code systems provide product traceability and tracking capabilities throughout work-in-progress activities, finished goods inventory, packaging, and shipping. This results in many benefits including enhanced productivity, less waste and significantly lower costs. Datalogic ADC is aware of the benefits manufacturers can gain from implementing a bar code scanning system because we use our own technology to improve our internal manufacturing processes.



### Traceability

Whether in agriculture or in electronics, tracking of materials through the production process is becoming mandatory. Because they can provide a larger amount of data in a much smaller footprint, 2D bar codes enable a wide variety of track-and-trace applications. Their relatively small size means these codes can be directly marked on everything from delicate electronic circuit boards to automotive parts with uneven or curved surfaces. Strategically placing Datalogic ADC hand held scanners at critical component assembly points or using mobile computers to manage material transfers from location to location greatly reduces the paperwork required to document and maintain a products history.

### Productivity and labor tracking

An efficient and cost-effective manufacturing process is a must for companies competing in today's global marketplace. All stages of the production flow need to be monitored. The use of automated data capture technologies at the beginning and end of each process

provides an accurate assessment of the labor used for an operation allowing for reliable profit and loss analysis. Armed with real cycle times, a production line leader or manufacturing engineer can spot and address inefficiencies and bottle necks that are slowing productivity. Both 1D and 2D barcodes enable quick and error-free data collection for step by step tracking of each single good or subassembly through the complete production process. Mobile computers, tethered and cordless scanners can satisfy the needs of production line organized either by counters or aisles guaranteeing operator mobility.

### Maintenance

Maintaining a facility's production machinery and assembly lines is a full time job. Mobile computers virtually eliminate the paperwork associated with inspections, preventive maintenance, and calibrations, or repairs by recording maintenance activities as they occur. Wireless communications keep the work order system up to date and allow managers to redirect maintenance employees when critical situations threaten to stop production.



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## FIELD FORCE AUTOMATION

Enabling staff in the field is increasingly viewed as an integral part of a unified customer strategy. Sales, service, utility and carrier representatives benefit from field force automation (FFA) solutions that address the customer needs of instant capture of information, to reduce time delays, avoid manual double entry data errors and enhance field force productivity. From an operations perspective, availability of field information in near real time allows to plan delivery schedules, reduce inventory and monitor & control the field workers

### Courier

Couriers deliver a variety of letters, packages and parcels. Location data and signature capture functionality help the courier effectively document proof of delivery. The same GPS data from location also helps with route optimization. In scheduled pick up services this can be a strong contributor to the customer service experience, where posted pick up times are expected to be adhered to.

### Sales

Field sales personnel need a device that connects wirelessly through multiple media including PAN, WLAN, and WWAN. They need a single device that combines cellular voice communications with computational tasks and data connectivity. Windows Mobile is a critical requirement for field service personnel. It provides users easy access to PIM data, MS Office applications, and a certified platform for application compatibility.

### Utilities

Utility personnel have the ability to shorten billing cycles with mobile computers that communicate meter data via WWAN once read. Online access to service materials like manuals allows technicians to respond proactively to both service and maintenance related needs.

### Service

Field service technicians install, repair, and maintain equipment at the clients' facility. They must frequently communicate with dispatchers and customers by voice or text, such as with SMS or e-mail. They spend a great deal of time on the road, using navigational aids to direct them between stops and around traffic. They are constantly exposed to harsh environments, so a rugged device is paramount.



FALCON™ MOBILE COMPUTER



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## HEALTHCARE

In the healthcare industry today, it is absolutely critical to provide the most advanced patient safety, excellent care and most efficient communication between medical professionals. Fortunately, this has been made possible through affordable and life-saving Health Information Technologies (HIT) for medical facilities around the world.

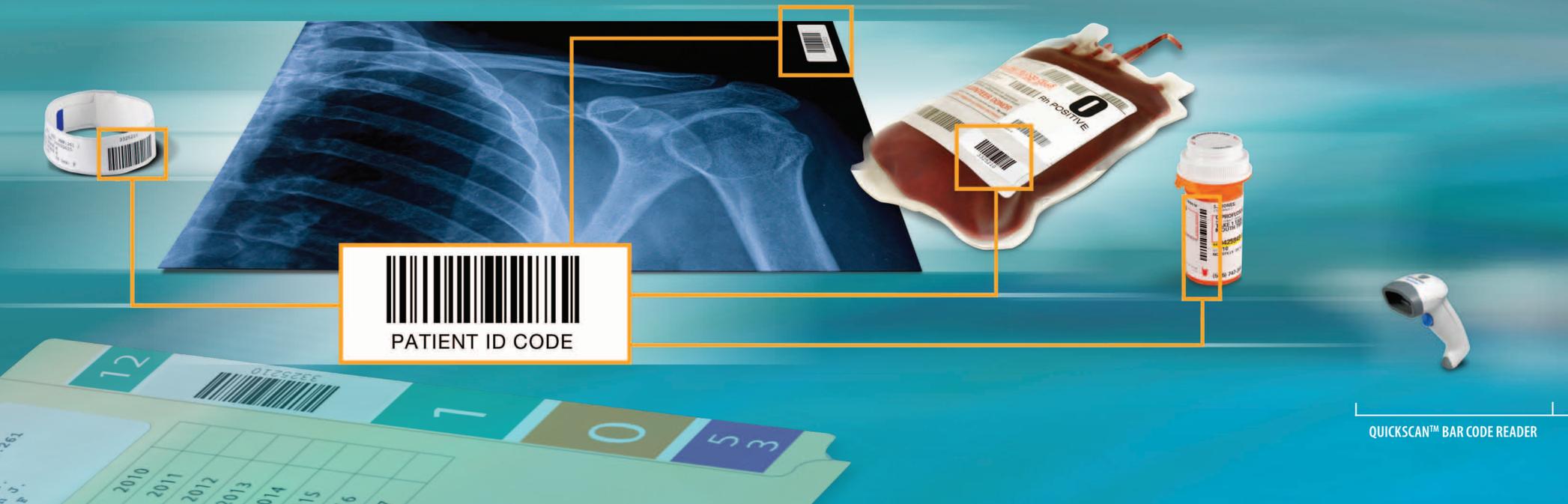
The shift towards HIT is clear. According to the Healthcare Information and Management Systems Society, nearly 65% of U.S. hospitals purchased a Clinical Decision Support application for the first time in 2010. Additionally, the American Recovery and Reinvestment Act expects more than \$19 billion to be invested into HIT to improve the quality, safety and efficiency of healthcare systems.

So which HIT system is being identified as the strongest investment? Today, bar code scanning has become a leading technology for point-of-care, administrative, laboratory and pharmacy applications in the healthcare industry. With the ability to capture data without human interference, bar code scanners have proven to be the most cost-effective identification technology today.

From patient admittance to post care services, bar code scanning has revolutionized the way hospitals collect information. Automating manual processes through this technology provides patients with the best care and improves the productivity of any medical team in the process.

### Top Challenges for Healthcare:

- Updating Patient Medical Records
- Medical Staff Productivity
- Precise Pharmaceutical Dispensing
- Laboratory Specimen Tracking
- Inventory Management
- Positively Matching Patients with Medications
- Supplies and Equipment Tracking
- Accurate Patient Billing



## Things to Consider

**Cost of a Mistake:** As humans, we accept our tendency to make mistakes; however, the healthcare industry has not. Even the smallest amount of negligence has the potential to cause not only a major lawsuit, but the loss of life. With medical errors responsible for more than 200,000 deaths each year in the U.S. alone, the healthcare industry can no longer afford to make mistakes.<sup>1</sup>



Bar code scanners provide the accuracy and assurance of collecting the right information the first time, significantly improving patient safety. In fact, bar code scanning can reduce potential errors during medication administration by over 50%. Now, multiply this risk reduction across nearly every healthcare application and imagine the difference.

**Loss of Productivity:** According to Healthcare IT News, nurses spend 25% of their time on indirect patient care activities.<sup>2</sup> Although the nature of this industry breeds redundancy, there is a clear opportunity to bring medical professionals back to direct patient care activities. By using bar code scanners to capture critical information during the natural flow of patient care activities, more time will be available for direct patient care due to a more productive medical team.

## Benefits of Data Capture

**Real-Time Communication:** Bar code readers provide an efficient and accurate real-time communication platform by collecting, analyzing and reporting information at the source. Additionally, these devices eliminate costly communication breakdowns and allow the medical staff to make informed decisions based on up-to-the-minute data as opposed to partial and outdated information.

**Speed and Accuracy:** In an industry where every second counts, healthcare facilities need technology to promote speed during activities. Bar code readers from Datalogic ADC are known for their high performance capabilities with quick scanning rates and outstanding reliability. Not only are these readers fast, but they provide completely accurate data capture and recall, which is the most critical component to look for when selecting a bar code reader for a healthcare environment.

**Productivity:** Bar code technology has completely transformed manual data collection and entry. By capturing and communicating data at the source, medical professionals are able to perform the same tasks with more productivity. Eliminating time-consuming manual processes allows nursing staff to spend more time diagnosing and treating patients. Increased productivity reduces costs, providing clear benefits to the medical facility.

1. *The Scientific American's Deaths from Avoidable Medical Error (2009-08-10)*

2. <http://www.healthcareitnews.com/news/survey-shows-nurses-spend-most-their-time-paperwork>



Disinfectant-Ready Enclosures

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GRYPHON™ BAR CODE READERS FOR HEALTHCARE

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