



# FULFILLING EXPECTATIONS: THE HEART OF OMNICHANNEL RETAILING



Creating the supply chain visibility, accuracy, control and flexibility retailers need to meet the demanding fulfillment expectations of the omnichannel customer.

Retail is all about the customer experience. Omnichannel retail hasn't changed that, but it has expanded on it. For retailers going beyond brick-and-mortar into the virtual world, it's no longer just about the in-store experience. It's about an end-to-end experience that begins whenever and wherever the customer orders: in the store, on a smartphone, on the store's e-commerce site. The final—and maybe the most important—part of the experience is flawless fulfillment.



► **Did the customer get her merchandise when it was promised?**

► **Is the order accurate?**

► **Does she love it?**

If the answers are positive, you've got a repeat customer. If they're unsatisfactory, you've got some work to do. In omnichannel retailing, the ability to streamline fulfillment of customer orders by leveraging inventory across the entire supply chain can be a major competitive differentiator.

This paper discusses how omnichannel retailing is changing end-to-end supply chain operations, especially when it comes to meeting customers' complex fulfillment demands. It also examines the growth in importance of direct-to-customer shipping and offers suggestions for how retailers can utilize technology to make all the components of the supply chain work seamlessly together by providing the visibility, accuracy, control, flexibility and efficiency to your operations.

## ALL FOR ONE

The expansion of both brick-and-mortar and virtual retail channels creates a wide range of customer touch points—stores, outlet locations, e-commerce sites, social media commerce, catalogs and possibly seasonal or short-term locations such as pop-up stores. And no matter where the customer makes her purchase, she expects fast, hassle-free, flawless fulfillment.

The increased focus on fulfillment in omnichannel retailing means the supply chain plays as important a role in the shopper experience as the associate on the sales floor, the buyer or the merchandising manager. In the omnichannel world, all the resources of the retailer's supply chain—from manufacturers to transportation providers to distribution centers to warehouses to the stores themselves—are marshaled to serve a single shopper who has placed a single order. The need to optimize this end-to-end, omnichannel customer experience is transforming the way the retail supply chain delivers the goods.

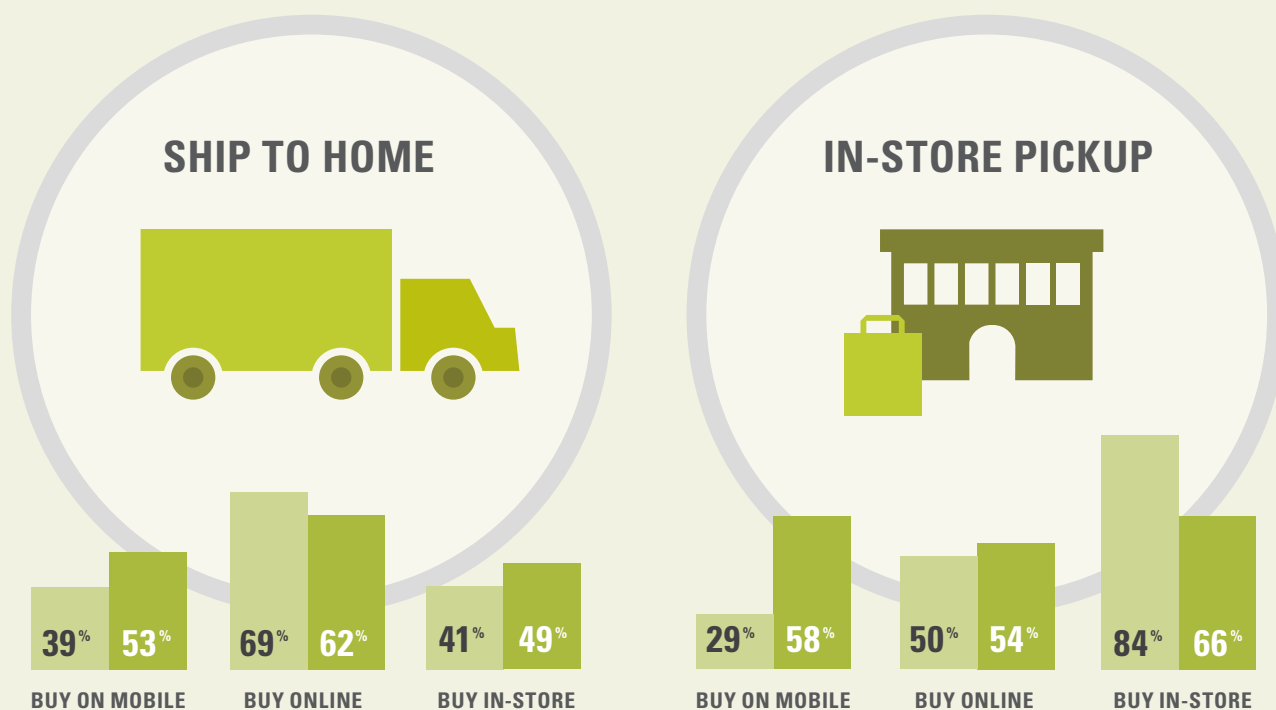
# THE OMNICHANNEL FULFILLMENT EXPERIENCE



In omnichannel retailing, all the resources of the supply chain are focused on transparently serving a single shopper who has placed a single order.

# THE EXPANSION OF FULFILLMENT OPTIONS IN OMNICHANNEL RETAILING

Research shows that in the next five years, the most significant changes in omnichannel fulfillment will be driven by the increasing use of mobile devices. As shown in the Motorola Solutions' Retail Vision Survey, the most dramatic shift is in the in-store pickup of goods ordered on mobile devices, a fulfillment option predicted to virtually double by 2017. This is good news for the customer, offering added convenience, and for the retailer, delivering additional in-store traffic. No matter what fulfillment method the customer demands, the supply chain has to be able to deliver according to his or her instructions.



Source: Motorola Solutions' Retail Vision Survey, May 2012

2012 2017

# THE OMNICHANNEL SUPPLY CHAIN

In omnichannel retailing, the goal is to create and optimize a supply chain that stretches seamlessly from manufacturer to customer. The new omnichannel supply chain paradigm is characterized by increasing system complexity, driven in large part by the need to offer multi-channel customers more choices: more SKUs, greater product assortments and increased product diversity. It's also driven by the need to meet individual customers' specific fulfillment preferences and expectations.

## HOLISTIC VIEW OF OMNICHANNEL FULFILLMENT



## DIRECT-TO-CUSTOMER SHIPPING

Not so long ago, retail supply chains were focused on one relatively simple task: sending bulk shipments of merchandise to warehouses and stores to replenish inventory. Although bulk shipments remain a retailing staple, the rise of omnichannel retailing is placing new emphasis on fulfilling “eaches,” the increasing number of one-at-a-time customer orders. How are they doing that? With direct-to-customer shipping.

Direct-to-customer shipping is the critical final step in the end-to-end customer experience. But because omnichannel customers have a multitude of shipping choices, it's hardly a simple one. Motorola Solutions' Retail Vision Survey, May 2012, reveals the magnitude of the fulfillment changes that are underway. The age-old paradigm—buy a product at the store and take it home with you—is still important, but it's starting to lose ground to other fulfillment methods. According to the research, although almost 85% of fulfillment operations use this method today, retailers estimate a drop to 66% in five years.

This new emphasis on streamlining fulfillment for individual customers is causing many retailers to take a more holistic view of their supply chains. Certainly omnichannel systems include traditional supply chain components: manufacturers, distribution centers, warehouses and the transportation that carries goods between them. But omnichannel supply chains also go beyond the traditional to include enterprise and individual store systems, providing store-level inventory management and real-time visibility and control of cross-channel inventory from the supplier to the shelf. And, ultimately, to the customer.

# OMNICHANNEL SUPPLY CHAIN MANAGEMENT

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One result of omnichannel retailing is that the supply chain has become more complex, due largely to the growing need for the efficient handling of cross-channel inventory location and allocation. It's no surprise that in the Motorola Solutions research, the most common causes of customer dissatisfaction in stores centered on product unavailability: out-of-stocks, empty shelves, lack of correct sizes or colors or simply being unable to find what they came in to purchase. Forward-looking retailers are planning and upgrading their entire omnichannel supply chains to avoid these kinds of issues by building in a number of critical management capabilities. And, for most, the driving force is providing visibility, accuracy, control, flexibility and efficiency.



## VISIBILITY

To meet customer expectations, you've got to be able to see what you have and know exactly where it's located across all supply chain channels. When a customer buys an item online and wants to pick it up in the store, or wants it shipped for next day delivery, systemwide visibility is critical. You can't promise a customer you have a certain color in a certain size unless you're sure it's actually available, and you can't promise you'll meet delivery expectations if you don't know if the product will be ready for shipment in the requested time frame. In managing the omnichannel supply chain, end-to-end cross-inventory visibility is vital.



## ACCURACY

The benefits of supply chain visibility are reliant on the accuracy of the available inventory information. The system says a product is available for two-day shipment from an East Coast distribution center, so an associate promises that time frame to the customer. But what if the information in the system is incomplete or wrong? The ramifications are serious: a lost sale, a dissatisfied customer. The same goes for fulfillment accuracy; delivery of an incomplete and/or incorrect order guarantees an unhappy customer. Supply chain systems capable of providing accurate, supply-chain-wide inventory data and visibility are crucial in omnichannel retail environments.

# INVENTORY VISIBILITY: VALUE VS. ACTUAL

In a July 2012 Retail Systems Research study, respondents exposed the lag between the perceived value of visibility and the current status of visibility.

## SYSTEM-WIDE INVENTORY VISIBILITY



## DC AVAILABLE INVENTORY



## STORE INVENTORY LEVELS



## ONLINE/DIRECT CHANNEL INVENTORY AVAILABILITY



## INBOUND TO DC INVENTORY OR ORDERS



## STORE ON-SHELF INVENTORY LEVELS



## INBOUND TO STORE INVENTORY OR ORDERS



## VISIBILITY INTO DROP-SHIP VENDOR INVENTORY



Source: RSR Research, July 2012

■ Perceived Value

■ Current Status



## CONTROL

Today's connected consumers not only want to be able to buy when and where they wish, they also want to have their order fulfilled to their exact specifications. To efficiently deliver consistent experiences to customers who shop via one or more channels, retailers need real-time access to—and dynamic control over—their entire inventory. The days of inventory silos for in-store and online fulfillment are gone. Being able to control total inventory access, availability and allocation is key to the ability to deliver merchandise to the right place at the right time and keep omnichannel customers satisfied.



## FLEXIBILITY

Today's retailers can no longer afford to have rigid supply chains. Having multiple sales channels requires the supply chain to respond to, accommodate and anticipate a great many external and internal inventory needs.

- ▶ Would a shipment of tablet computers headed for San Francisco be better utilized in Seattle?
- ▶ Can a warehouse respond to a last-minute customer request to change a ship-to address while in transit?
- ▶ When an in-store customer changes her mind on what she's just purchased, can the associate immediately locate the preferred color and arrange to have it shipped to the customer?

In an omnichannel environment focused on meeting customers' requirements, flexibility is mission critical.



## EFFICIENCY

In a multiple channel retail environment, maximizing efficiency in every part of the supply chain—in-store, at the warehouse, in transit—is necessary for meeting customer expectations, for ensuring that inventory is capable of serving multiple channels, and last but not least, for controlling costs. Omnichannel efficiency takes many forms. An associate uses a wireless device to provide product information and availability without leaving the customer's side. Warehouse and distribution center workers use hands-free technology to shelve and pick merchandise faster and more accurately. Products can be shipped from the location nearest the customer—whether it's a distribution center, warehouse or a retail store—to reduce transportation and delivery costs.

How are omnichannel retailers designing their supply chains to deliver these critical management capabilities? For most, the driving force in providing visibility, accuracy, control, flexibility and efficiency is mobile technology.



# MOBILE TECHNOLOGY: DRIVING OMNICHANNEL FULFILLMENT

The demands of omnichannel fulfillment make it imperative for retailers to have unified visibility of inventory at every stocking location. By leveraging this unified view of cross-channel inventory, a retailer is able to understand product availability—what is in stock, available in overstock or out of stock. It can tell when and where a product will be available. It can also show the optimum method of flawlessly fulfilling the specific order. How are retailers going about designing supply chain solutions that help them do all that? By turning to the proven enabler of multi-channel supply chain optimization, mobile technology, including wireless networks, equipment and devices.

## MOBILE INFRASTRUCTURE

The ability to deliver cross-channel inventory visibility, allocation and fulfillment is in large part dependent on a retailer's mobile infrastructure. Wireless local area networks (WLAN) are fundamental to providing the information, flexibility and control needed to streamline omnichannel supply chain operations and create delighted customers. Retailers must ensure their WLAN is able to support the entire supply chain—stores, warehouses, distribution centers and suppliers. It must also support the emerging technologies of fulfillment such as cloud-based inventory access and allocation, automated warehouse management and handheld mobile computers that provide real-time visibility throughout the supply chain while optimizing workforce effectiveness and efficiency. The WLAN must also provide the high performance necessary for bandwidth-intensive applications, the security to protect customers' private information and the reliability to ensure consistent availability.

## PRODUCT IDENTIFICATION TECHNOLOGY

Mobile networks and technology provide the product identification and location information necessary to get the most benefit from cross-inventory management. Barcodes on merchandise or on in-store kiosks, in dressing rooms or on shelves enable sales associates, and even customers themselves, to instantly access product details from the store's web application or from the Internet.

Radio Frequency Identification (RFID) tags are playing an increasingly vital role in both in-store and warehouse/distribution center operations. RFID technology has been used successfully for years in the identification of pallets, cases, cartons and other bulk shipment containers in the warehouse, in transit and in the store's back room. Today, the trend is moving toward item-level identification, in which every item is labeled, for example, with an RFID tag that delivers the ultimate level of inventory detail: this product is on that shelf; this product is in transit to this store from that supplier; this product is in aisle BC, slot 3567-02, in this particular distribution center.

## MOBILE DEVICES

Omnichannel retailing is also one of the catalysts for the new generation of mobile devices that are mobilizing the retail workforce and empowering them with real-time information encompassing the entire supply chain. Optimized for inventory management, control and access in the warehouse and on the sales floor, the new mobile devices enable employees to be more productive, more efficient and more customer-focused. As opposed to consumer-grade technology like smartphones or tablets, retailers can utilize rugged new business-grade devices built for the fast-paced omnichannel environment. Using handheld computers or wearable devices like smart badges, sales associates and warehouse personnel can access product information and pinpoint product location to ensure fulfillment in accordance with each customer's requirements.

**// Top supply chain technology adoption priorities for the next 12-18 months include: cross-channel inventory optimization, distributed order management, in-store wireless devices and applications, and integrated product catalog and product information management. //**

RSR Research,  
2012 Benchmark Report,  
March 2012

## THE NEXT STEP

Where does your omnichannel retail operation stand in utilizing mobile technology to optimize your supply chain operations and streamline customer fulfillment? Many, if not most, retailers are still in the beginning stages of designing and deploying a multi-channel fulfillment strategy and network. Many are struggling with both strategies and details. For these omnichannel retailers, it makes sense to partner with a technology and systems integration provider with long-term expertise in wireless networking as well as long-term experience in retail operations. Together, they can work to provide the inventory visibility, accuracy, control, flexibility and efficiency to optimize fulfillment and maximize omnichannel customer satisfaction.

**MOTOROLA RETAIL LEADERSHIP SERIES** This white paper is one of a series examining the challenges, the opportunities and the realities of how technological innovation is shaping the retail industry.

For more information visit [www.motorolasolutions/retail](http://www.motorolasolutions/retail)

**MOTOROLA SOLUTIONS**



# HOW BRICK-AND-MORTAR RETAILERS CAN **WIN THE OMNICHANNEL BATTLE**





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Forward-looking retailers are using wireless mobile technology to integrate the dueling worlds of in-store and online shopping, communications and sales.

Jerry is looking at 3D television sets at a big box department store. Lots of things are running through his mind: Should I buy 3D now? Is this unit in stock? Is this really a good price? He uses his smartphone to compare prices at other stores. At the same time, the store's wireless network analytics and in-store location system sends an alert that a customer is browsing for a TV and searching for comparison information on the Web.

A store associate equipped with an enterprise-class mobile computer is alerted and offers personal assistance to the customer. Using his device, the associate looks up the current state of 3D programming and accesses information and reviews of the products the store carries. At the same time, he checks to see if he has a particular model in inventory or can he ship directly to the customer's home.

Armed with all this information, the associate is able to make the sale, and—before Jerry has second thoughts while waiting in the checkout line—uses his device to capture his payment information and complete the transaction right where they're standing.

# ENABLING THE OMNICHANNEL MODEL

You can't fight progress. You can't ignore it, either.

Over the last decade, brick-and-mortar retailers have been forced to deal with the Internet and the broadband communications revolution in all its glory: mobile smartphones, tablet computers, texting and Twitter, social networking and the enormous challenges posed by savvy e-tailers. There's no doubt that the invasion of retail stores by these mobile enablers of virtual shopping has been costly. Not just in sales, but in customer loyalty, too. Now, however, retail stores are fighting back with their own aggressive omnichannel strategies based on information provided by their wireless networks.

## KEEPING CUSTOMERS CONNECTED

More than 80% of brick-and-mortar retailers will have wireless networks available in their stores by 2017.

Source: Motorola Solutions' "Annual Holiday Shopping Survey Results," December 2011



## OMNICHANNEL RETAILING, DEFINED

In its most basic terms, omnichannel retailing means connected customers can shop for and purchase the same items across many different channels. In a retail store. On their home or laptop computers. Perhaps most importantly, on their connected mobile devices, which allow them to shop online for virtually anything, virtually everywhere: on the bus, on the street, in the parking lot, at the kitchen table, in bed. Even while standing in the middle of your sales floor.



## SHOPPERS LOVE OMNICHANNEL

Connected customers are hooked on omnichannel shopping. Why wouldn't they be? They can use their mobile devices to easily and instantly comparison shop for availability and price, connecting with your competition virtually whenever and wherever they want. If they're in your store and you don't have what they want in stock, they can use their smartphones to see if it's available at your competitors' stores or at an online e-tailer. If they think your price is too high, they can compare your prices or deals with your competitors. If customers like what they find online, they can buy it online. That usually means they won't buy it from you. The question is: How can brick-and-mortar retailers turn the omnichannel model to their own best advantage?



## GIVE THE PEOPLE WHAT THEY WANT

Brick-and-mortar retailers have never been known to shy away from a good fight. That's why it's no surprise that a fast-growing number of retailers are finding ways of leveraging the omnichannel world to create their own competitive differentiation. They're beginning to turn the tide not by continuing to struggle against online retailing and the omnichannel model, but by embracing them.

# 1 OMNICHANNEL SALES ARE ABOUT SERVICE, NOT SELLING

Jenny enters a high-end department store and logs on to the retailer's guest access WiFi network and mobile application, which she uses to find the location of the women's dress department. The network immediately alerts a sales associate to meet her and she helps Jenny find the perfect dress. At the same time, the store sends Jenny's smartphone a coupon for half-off a pair of shoes. The associate introduces a selection of heels to go with the dress she selected.

Jenny likes a pair and decides to buy them. Unfortunately, the right color isn't in stock in her size, so the associate uses her device to find that the right size and color are available in another store location, and arranges to have the shoes sent to Jenny's home.

## NOTHING SELLS LIKE SERVICE

Omnichannel retailing is not about you. It's about your customers and their experience in your store. Brick-and-mortar retailers are quickly discovering how to use omnichannel solutions to delight shoppers with enhanced service. They're integrating both their face-to-face advantages and the efficiencies of the online world to create unique, memorable, combined in-store/online engagements. You make sales by serving customers better, not by selling them harder. This can lead to increased revenues and stronger, more loyal customer relationships.

Technology is the great enabler of service. Utilizing your wireless network and access to your online presence on the cloud system, you can give customers access to all the information they need—streaming video demonstrations, up-to-the-minute inventory information, personalized coupons or offers

and more—right at the point of sale. Equally important, you can serve customers with a team of sales associates enabled and empowered by mobile technology. One key is making certain that your sales associates have as much, if not more, information about your products as the customer has. Another is making sure associates have the same customer data—from demographics to purchasing history to shared likes and dislikes—to help them deliver more thoughtful, more personalized service.

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## BUILDING STRONGER CUSTOMER RELATIONSHIPS

Over half of brick-and-mortar retailers see improvement of customer service as a primary driver of technology investment.

Source: Motorola Solutions' "Retail Vision Survey," May 2012

## 2 LEVERAGING CUSTOMER-FOCUSED INTERACTIVE APPLICATIONS



### THE APP EXPLOSION

Omnichannel success depends on keeping customers satisfied. The slightest glitch in service or convenience, and they can instantly choose another channel to help them find what they want. Brick-and-mortar-based retailers are addressing this omnichannel reality with a variety of interactive applications and sales processes that enhance the customer experience across all channels, notably inside the store itself. One of the fastest growing is the store's mobile application, accessed through the guest WiFi network. Mobile applications enable a variety of customer interactions ranging from greeting a loyal customer to enabling her to check prices with a barcode scanner to pushing coupons based on her past purchase history. Other applications include mobile check out capabilities that allow associates to accept payment using smart handheld devices, eliminating the frustration of waiting in long,

Dana and Samantha are shopping in a women's clothing store in an outlet mall. After consulting with a store associate, and looking at and trying on a number of garments, they decide to purchase two or three items each. They thank the associate and take their purchases to checkout. What they find is three registers open, but with lines four or five customers deep at each. Unwilling to wait 10 or 15 extra minutes to checkout, they drop their items on the nearest table and leave the store without making any purchases.

inefficient cash register lines. Others include smart dressing rooms, interactive video displays and apps that allow customers to more easily navigate your store.

The rise of omnichannel retailing means that application innovation is continuing at a rapid rate with new apps appearing seemingly every day. But customers have only so much space on their smartphones and only so much time to spend on learning new applications. That's why on the horizon are so called "over-the-top" apps, single applications that customers can use across a number of

different, even competitive, retail operations. These omnichannel applications provide customers with value when they're not in your store—think shopping list aggregation—then add retailer-specific functionality inside the store. This includes viewing a store map; getting product information by scanning shelf or kiosk barcodes; accessing selected social networking tools such as likes and peer reviews; finding online help; seeing limited price matching from respected retailers; requesting associate assistance and streamlining electronic payment.

### CHECKOUT GETS PERSONAL

Within 5 years, retailers expect more than half of all customer transactions will be completed using self-checkout on mobile devices.

Source: Motorola Solutions' "Retail Vision Survey," May 2012

# 3 GAINING INSIGHTS FROM OMNICHANNEL ANALYTICS

A grocery store's wireless system identifies Kathy as a loyal customer when she enters into the store.

Based on the data the store's network application has collected about Kathy—including purchase history and shopping behaviors—the store knows that she normally starts at the deli kiosk by the entrance and that she almost always buys a pound of turkey and American cheese.

Having filled the deli order, the system then pushes a message to Kathy's smartphone, alerting her that the order is ready in addition to a personalized coupon for a discount on fresh baked bread, which she can find in aisle four. Kathy is pleased and uses the coupon to buy the bread. The retailer is pleased that they have both a satisfied customer and larger basket.

## ENHANCING EXPERIENCES WITH INFORMATION

Collecting and leveraging customers' personal information have long been staples of online retailers to provide personalized recommendations, but brick-and-mortar stores are catching up quickly. By more closely integrating their online and in-store operations, they're enhancing their knowledge and understanding of customers through integrated data collection and analytics. For example, when a woman logs onto to a garden center's WiFi network, the system sees that she has recently purchased vegetable seeds and sends a coupon for 25% off fertilizer to her smartphone. A home improvement store associate sees that a customer is an avid birder so he shows him the store's new shipment of birdhouses. A pharmacy informs a loyal customer that her prescription medication has become an over-the-counter drug and offers her a personalized introductory discount.

The system makes information—ranging from demographic and psychographic data to purchasing histories to personal shopping behaviors—available to sales associates on the floor. As in virtually everything omnichannel, the key is making sure that every store and every associate has access to the crucial customer information your network has accumulated. The more you and your employees know about your customers, the more you'll be able to provide more personal, more consistent, more satisfying and more differentiating customer experiences.

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**The more you and your employees know about your customers, the more you'll be able to provide more personal, more satisfying customer experiences.**

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## FRIENDING IS TRENDING

By 2017, more than half of retailers plan to make use of psychographic metrics using social network data.

Source: Motorola Solutions' "Retail Vision Survey," May 2012



# 4 MANAGING THE OMNICHANNEL SUPPLY CHAIN



Dan and Tim visit a sporting goods store to purchase gear for a fishing trip they're taking in two days. Among other items, they choose top-of-the-line fly fishing vests. Unfortunately, one's size is out of stock. The sales associate uses his smart mobile device to locate the correct size in another store location. The customer agrees to have the vest shipped to his home, but only if it can be there in two days.

The sale is made, the supply chain is engaged and the vest is delivered overnight in time for the trip. The fishing is excellent.

## BEHIND THE SCENES BRANDING

In-store and online aren't the only ways omnichannel customers interact with your store and your brand. The truth is, a crucial part of the shopper experience happens at the customer's mailbox or front door. If the delivery is on time, the experience was positive. If it doesn't arrive when promised, you have a dissatisfied customer. The speed of omnichannel retailing can place substantial new demands on the supply chain, especially for premises-based retailers. If the customer's purchases aren't in stock, the traditional take-it-home-with-you advantage disappears. Now you have to compete with online retailers who offer numerous shipping options, including next-day delivery and even same-day delivery.

Brick-and-mortar retailers are relying on their wireless mobile systems to enable more effective management of their supply chain, warehouse and shipping environments. Although the customer nirvana has always been same day delivery, what's most important is actually time-defined delivery, usually within a 2-4 day window. The truth is, only a small percentage of online shoppers are willing to pay extra for expedited delivery. What shoppers most want to know is when their goods will arrive. If they arrive within the promised time frame, the customer is satisfied. The key is a wireless network that provides real-time visibility across the supply chain to enable accurate, reasonable delivery estimates and streamlined warehouse and logistics operations to ensure deliveries are made within those estimates.

## DELIVERY DIFFERENTIATION

Amazon and other e-tailers are investing in the capability of offering same-day delivery for customers in urban areas.

Source: Amazon.com and Business Week

# 5 BREAKING DOWN THE SILOS BETWEEN IN-STORE AND ONLINE

Bob enters a location of a 10-site, 4-city regional bookstore. He is greeted by a sales associate and immediately asks if he can use a 40% discount he's received online from the company's outlet website in this store. The associate has never heard of such a discount, and as he calls up his manager to try to decide what to do, Bob mutters "I guess not" and leaves the store.

## ASSURING CONSISTENT CUSTOMER EXPERIENCES

When in-store operations and online merchandising channels exist as separate silos that don't consistently talk with each other, customer experiences and sales can suffer. The omnichannel model gives brick-and-mortar retailers the opportunity to interact with customers in many different ways. Face-to-face in their stores. On their guest WiFi network. On their online e-commerce site. On their store mobile application. On e-tailing partner sites. Connected customers are well

prepared for this model. No matter where they are, no matter what device they're using, they know how to connect with your store virtually anytime they choose. Retailers themselves, however, may not be as prepared for the omnichannel world as their customers are.

Many brick-and-mortar operations have fallen into the "silo syndrome." They're organized into separate teams: in-store, e-commerce, network application, outlet management and more. All too often, these silos and teams are neither integrated nor coordinated, so much so that they can even end up competing with each other. That can cause customer brand experiences that may not be consistent across

**Brand experiences that may not be consistent across all channels can lead to customer confusion, dissatisfaction and loss of business.**

all channels, which can lead to customer confusion, dissatisfaction and loss of business. That's a problem that omnichannel retailing is helping to eliminate, as the problems caused by lack of communications among silos become more and more apparent. The reality is, as retailers better understand the benefits of omnichannel, they more clearly see the need to break down the internal barriers that can lessen or negate those benefits.

## SO LONG, SILOS

More than half of brick-and-mortar retailers believe that integrating e-commerce and in-store experiences, and the integration of multiple retail systems, will be important over the next five years.

Source: Motorola Solutions' "Retail Vision Survey," May 2012



## OMNICHANNEL BECOMES OMNIPRESENT

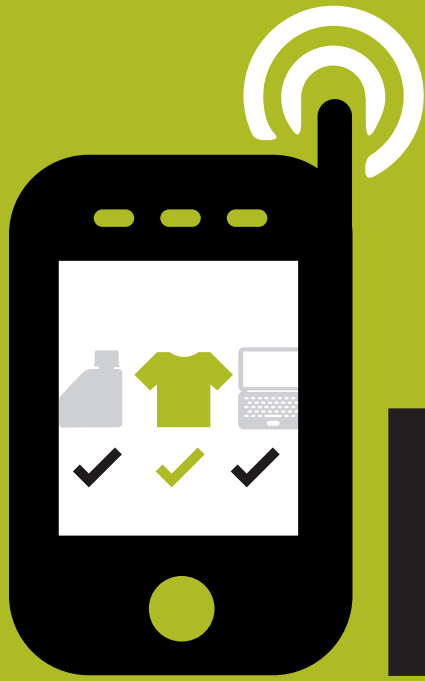
For a growing number of in-store retailers, the online/omnichannel battle is over. Today's forward-thinking, in-store retailers have decided to embrace the omnichannel retailing model and adapt it to their own needs. They're using the empowering, technology-driven customer service enhancements and operations benefits of omnichannel to drive revenues by doing what successful brick-and-mortar retailers have always done: give the customers what they want.

### MOTOROLA RETAIL LEADERSHIP SERIES

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# RFID

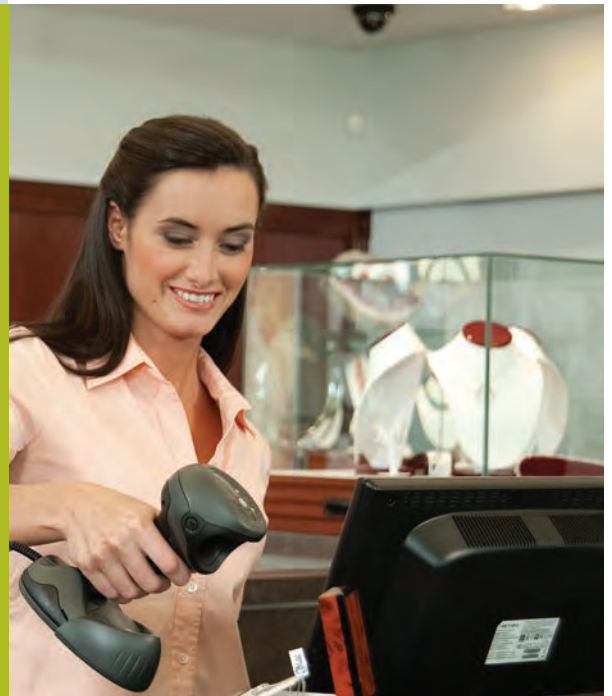
## OMNICHANNEL SUPERSTAR

HOW RFID IS BECOMING THE TRANSFORMATIONAL TECHNOLOGY  
IN THE OMNICHANNEL RETAILING EXPERIENCE.



*On the train during her Friday afternoon commute, Abby leafs through a catalog and finds the perfect sweater to go with the pants she's wearing to a party tonight. She immediately uses her smartphone to visit the store's mobile website to see if the location nearest her home has the sweater. The store's item-level RFID tagging system provides the accurate inventory visibility essential to omnichannel retailing, allowing Abby to access inventory and find that her size is available in stock. She purchases the sweater and arranges to pick it up at the store on her way home. Her purchase is waiting for her when she arrives. The sweater is a perfect fit, and the outfit is a hit.*

*Another satisfied omnichannel customer.*



Omnichannel retailing—with connected customers able to shop not only in the store but also online and on mobile devices—is changing how the industry views the retail store. The fact is, retail stores are finding themselves in a new and expanded role in the omnichannel universe, functioning not only as a retail storefront but also as a shipping and fulfillment center. The key is enhanced inventory visibility and control. Omnichannel retailers understand that being able to allocate items and fulfill orders from inventory located in any part of the supply chain is more efficient, more cost-effective and more likely to result in faster fulfillment and an enhanced customer experience. Virtually all retailers agree that the key to accurate inventory management is technology, notably Radio Frequency Identification technology, or RFID.





OMNICHANNEL RETAILING MEANS CONNECTED CUSTOMERS  
CAN SHOP FOR AND PURCHASE THE SAME ITEMS  
ACROSS MANY DIFFERENT CHANNELS.



## RFID EMPOWERS OMNICHANNEL RETAILING

RFID technology is an increasingly important enabler of omnichannel retailing. Especially important to apparel retailers is item-level RFID, in which RFID tags are attached to individual garments. Commonly integrated into the product's hangtag or pricing label, the tags are read by handheld or fixed RFID readers, providing real-time inventory visibility throughout the supply chain. The system enables store management, sales associates, even connected customers, to have the accurate, real-time product location and availability data so crucial to omnichannel retailing success.



*An exclusive boutique with limited floor space utilizes a “one size, one style” merchandising model. But what happens when two friends each fall in love with the same blazer, and the display jacket isn’t the right fit for either? For this model, accurate, systemwide inventory visibility is the key and item-level RFID technology makes it possible. Using her handheld computer, the sales associate locates the right sized blazers for each—one from another store, another from the distribution center—and arranges to have them shipped directly to the customers.*



## ENABLING PERPETUAL INVENTORY VISIBILITY

Serving all customers, in all channels, using all inventory. That’s omnichannel retailing and it’s energizing the retail business. Behind the scenes, one technology is empowering omnichannel retailers to maximize inventory control and flexibility throughout the supply chain—from manufacturer orders through direct-to-customer shipping. Today’s RFID technology helps increase the productivity of the retail store as both a sales channel and a fulfillment center. It also helps enhance customer satisfaction, optimize fulfillment and, ultimately, improve end-to-end supply chain ROI.



### Inventory Management

As the brick-and-mortar store becomes more integral to omnichannel supply chain operations, inventory management becomes increasingly critical. The store must be able to meet the expectations of in-store customers who wish to find exactly what they want on the sales floor, quickly and easily. It must also meet the needs of customers who want expedited shipping to their homes, whether they’ve purchased the item in the store, in an outlet or pop-up location or online. To do it well, you need accurate visibility of your entire inventory, whether it’s in the backroom, on the loading dock, in overstock locations, enroute to the store, on the sales floor, in the distribution center or anywhere in the supply chain.



### Customer Transparency

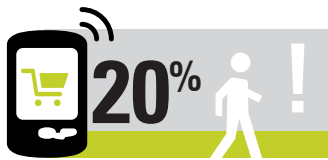
Visibility has always been important to inventory management. In the days before omnichannel retailing, it was mostly about providing in-store inventory information to store associates and management. That’s changing. Today, it’s also about providing inventory transparency to customers themselves wherever they shop. Omnichannel customers are sophisticated shoppers. A large percentage of them—some studies estimate up to 80 percent—research products online well before they venture into a store. And they want to research more than what a product looks like or how it operates. They also want to access a given store’s actual inventory to make sure the item they want is in stock in the right color and the right size. RFID is the technology that can make it all possible.



## Accurate Product Availability Data

A good example is RFID's ability to solve what is still a thorny problem for some retailers. A customer wants to order a specific item to be picked up at the store. The store's inventory shows only two such items available.

In non-RFID environments, that can be a problem because inventory is likely based on Point of Sale (POS) data, an inventory decrement model that may be neither accurate nor timely. The store cannot be absolutely sure both the items are actually available. They could be on a shelf, but they could just as easily be on a dressing room floor or have been placed in the wrong location. And because the store is always concerned about customer satisfaction, it may decide not to accept an order because it doesn't want to take the chance of disappointing a customer and perhaps losing goodwill and future business.



One research study showed that about 20% of customers who ordered a product online or on the phone for in-store pickup actually left the store empty-handed because the item could not be found.



In fact, according to the American Apparel & Footwear Association (AAFA), a typical retailer's inventory is only about 65%-70% accurate. That's totally unacceptable, and it's why an increasing number of retailers are turning to RFID.



Item-level RFID tagging is proving to deliver product inventory data that is up to **99.5% accurate.**

In addition, the use of periodic cycle counting and Geiger counters enables fast and accurate item locationing. With this type of inventory accuracy and accessibility, the store can accept more orders and keep more customers satisfied.





## Omnichannel Benefits of RFID

For the brick-and-mortar omnichannel retailer, the benefits of RFID-optimized inventory control are substantial. They include:

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### Optimized stock levels

Out-of-stocks are a prime source of frustration for both customers who can't find what they want, and retailers who can't sell it to them. When you know what you have—and what you need—at any given time, RFID-driven just-in-time replenishment enables you to drastically reduce, or even eliminate, costly, non-productive out-of-stock situations.

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### Higher unit sales

With accurate inventory visibility, you can sell what you don't have, which can dramatically increase unit sales. If your store doesn't have the right size or color the customer wants, the associate can find it by simply checking inventory, not just in the backroom but across the entire supply chain. When you know it's available, you can sell the customer and arrange to expedite shipping.

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### Less Margin Erosion

With full inventory visibility, it's easy to see which items are selling, or not selling, in each location. The RFID-enabled supply chain enables you to quickly ship items to the regions or locations where they are selling better. That means fewer markdowns and less margin reduction. In addition, end-to-end visibility improves loss prevention from theft, misplacement and inventory inaccuracy.

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### Multiple inventory counts

For many brick-and-mortar retailers, taking inventory is an excruciating, time-consuming and expensive task. Many stores have to close for inventory and are forced to lose sales as they are shuttered for one or more days. RFID-enabled inventory, utilizing item-level RFID tags, allow stores to take inventory more than simply once a year. Some stores are even able to take inventory on a daily basis. RFID makes taking inventory less expensive, much more accurate and up to 90% faster than traditional methods.

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### More efficient allocation

As the storefront increases its omnichannel role of being a direct-to-customer fulfillment center, end-to-end visibility is essential. RFID systems make it simpler and faster to view inventory and choose the most efficient location from which to ship an order, both in terms of product availability and proximity to the customer.

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### Reduction in DC capacity

By providing end-to-end inventory visibility and the ability to allocate and ship products efficiently from any part of the supply chain, RFID solutions are also helping retailers streamline their operations. As inventory silos are eliminated, the need for high-capacity warehouses and distribution centers is lessened and safety stock requirements are reduced, saving substantial dollars in capital and manpower costs.



*It's always an electric moment. Even if you know what's inside, opening a package is usually a pleasant experience. Except when the order a customer is expecting turns out to be inaccurate. Yesterday, Ken used his laptop computer to purchase several shirts and sweaters from his favorite store's website. Fortunately for Ken, one of the store's RFID-enabled kitting tables detects the omission of crew neck sweater from the order as it is assembled by a new associate inexperienced at order fulfillment. The associate was alerted, the correction was made, and the proper order was shipped. Ken receives his package within 24 hours as promised. He's anxious to see his purchases as he tears open the package and there they are. Just as he remembered them. The order is complete and Ken is happy.*

# ENHANCING THE CUSTOMER EXPERIENCE



Even in the omnichannel world, some things haven't changed for the brick-and-mortar store.

It remains the flagship of the brand experience, and RFID technology is helping ensure that the experience is positive, memorable and consistent in-store and across all channels. It begins with item-level RFID providing an accurate, real-time view of a product's availability in the store, including in-stock status, specific information such as color, style and size and precise location on the sales floor or in the back room. RFID also enhances the experience through innovative customer-facing applications like RFID-enabled kiosks that deliver real-time product information and technology-enabled fitting rooms that encourage customers to share their experiences and purchases with friends via social media.





## Increased fulfillment accuracy

As fulfillment becomes more and more important in the omnichannel marketplace, accuracy becomes more critical. After all, fulfillment is the last stage of the customer experience, and if it disappoints the customer, no matter how well the rest of the experience has gone, it can end up being a negative. Item-level RFID technology improves inventory visibility, control and accuracy. RFID-enabled kitting tables, handhelds and fixed readers make up the ideal toolset for optimizing store-to-store transfers and direct-to-customer shipping. RFID systems alert personnel to incomplete and inaccurate orders, dramatically reducing mis-shipments, providing important savings in transportation and shipping costs and enhancing efficiency and customer satisfaction.

## Omnichannel Goes Social

As social media becomes an increasingly important part of your customer's daily lives, it is also becoming one of omnichannel retailers' biggest new sales opportunities. It's no surprise that connected shoppers are also avid users of social networking, with a growing number communicating with their friends via Twitter, Pinterest, Instagram, IM or Facebook, just to name a few. By posting real-time photos to friends on social networks, a customer can get fast feedback while she shops and tries on clothes. What do you think of this style? How about the color? Is it really "me"? Maybe a friend will also be interested in the outfit. From an RFID-enabled fitting room, the shopper can instantly check to see if it's in stock in her friend's size and preferred color. This feedback can be one of the omnichannel retailer's most powerful sales tools. As customers upload photos of a retailer's products to their friends or their favorite sites, it enables your store to connect with and market to a wide variety of potential new customers.



### FULLFILLMENT AS ACCURACY

Omnichannel customers are not only shopping and buying through a variety of channels, they're also demanding the faster, more flexible fulfillment options. They may want to take the product with them or have it shipped to their home. They may insist on one-day or even same-day delivery. They may order online and want to pick it up at a store. Fulfillment is becoming a strong retail differentiator, and the fast, flexible fulfillment operations enabled by RFID are becoming a leverageable competitive advantage.







*A sporting goods retailer's weekly analysis revealed that, due to unanticipated milder weather patterns, there is considerably lower-than-anticipated customer demand for a high-end down parka in its Midwest region. At the same time, the analysis showed a greater-than-forecast demand for the product in its Pacific Northwest region. Empowered by its RFID-driven, end-to-end visibility, the retailer was quickly able to move most of its Midwest inventory of the garment to the northwest, at the same time creating a promotion that bundled the parka with a free stocking cap. The combination of inventory shift and marketing offer resulted in the product eventually exceeding expectations in overall sales.*

## SHAPING AND OPTIMIZING DEMAND

In omnichannel retailing, the ability to shape demand is a powerful competitive advantage enabled by the end-to-end supply chain visibility provided by RFID technology.

In the fast-paced omnichannel retailing world, accurate demand forecasting is crucial. Strategically speaking, the challenge is to align projected customer demand trends with your inventory, capacity and capabilities both short- and long-term. Tactically speaking, an equally important challenge is to be able to react quickly when customer demand and available supply fall out of alignment, which can rapidly lead to supply issues, below target revenue and customer dissatisfaction.



## Demand-Supply Gaps

It's just as important to know what you don't have as to know what you do have. Whether you have more inventory than your customers are demanding, or whether customers are demanding more inventory than you have, demand-supply mismatches are costly. Because forecasting is not an exact science, mismatches are more common than most retailers would like. When demand-supply mismatches occur, revenue, profitability, market share and customer loyalty are at risk. Demand shaping helps reduce the gap between forecast expectations and actual consumer behavior. It is a powerful customer-centric tool that identifies potential product/demand conflicts and provides solutions to optimize the use of available resources.

## The Demand Shaping Process

A successful demand shaping process is driven by real-time analysis, visibility and promotion. For a growing number of retailers, the agility enabled by end-to-end RFID visibility allows for quick development of omnichannel programs that shape customer demand to align with product availabilities. RFID is the ideal technology to deliver the information crucial to the demand-shaping process.

RFID identification provides crucial data from across the supply chain that enables real-time analysis of information that can quickly reveal significant demand-supply gaps that demand fast action.

Through RFID-driven visibility of end-to-end inventory—from manufacturers through DCs and brick-and-mortar stores—retailers have accurate, real-time information that enables fast creation and execution of programs to mitigate demand issues and optimize opportunity.

Depending on the specifics of the situation, promotional and marketing efforts can be quickly initiated. These programs can include fulfillment date manipulation, use of value-enhanced upgrades or substitute products, changes to the product mix or product location.

## Demand Shaping Tools

In an RFID-enabled omnichannel retail operation, demand shaping relies on real-time visibility and the ability to marshal forces—including retail store operations, supply chain management and marketing and promotion—to react to the situation. This visibility and integration enable retailers to develop and implement programs designed to address specific demand-supply issues by creatively shifting demand from what's not available to what is.

These programs mix and match a range of variables—notably price, promotion and product mix, or bundling—to achieve the dual objective of keeping customers satisfied while increasing turns, mitigating revenue loss and increasing profitability.

### Demand pattern recognition

### Real-time inventory visibility

### Streamlined demand steering



*A department store's customer loyalty program provides each member with a loyalty card with an embedded RFID tag. Through the store's opt-in network access application, the tag alerts a sales associate that a customer is in the store. Accessing the customer's data, the associate sees she's a woman who consistently purchases petite size business and casual clothing with a preference for name designers. The data is updated with every transaction, no matter what the channel, helping the store keep current with the customer's purchasing patterns. Once the shopper logs on to the store's network, the associate can greet her by name, show her some of the latest petite arrivals and even offer her a special discount on sale items. The best omnichannel retailers use RFID technology to be as loyal to shoppers as shoppers are to them.*

# INCREASING LOYALTY THROUGH ANALYTICS

Omnichannel retailers know the key to optimized customer loyalty is to understand everything they can about their patrons. Embedded RFID tags on loyalty cards, for example, provide the ability to aggregate real-time data from customers and channels. At the same time, the data is available for analysis by sophisticated business intelligence systems that help you identify the individual shopper's demand and purchasing patterns.

RFID solutions enable programs that allow your customers to be more loyal to you while at the same time helping you be more loyal to them. That's omnichannel retailing at its best.





## THE ROI OF OMNICHANNEL RFID

- Reduces Out-of-Stocks by 60% to 80%
- Improves Inventory Accuracy up to 99.5%
- Reduces Cycle Count Time by 75% to 90%
- Reduces Inventory Carrying Costs by 30% to 59%
- Reduces Receiving Time by up to 91%
- Improves Conversion Rate to up to 92%
- Increases Unit Transactions by up to 19%
- Increases Dollar Transactions by up to 6%
- Increases Sales by from 4% to 21%



# PROVEN BUSINESS BENEFITS

For omnichannel retailers, RFID technology solutions deliver a broad spectrum of critical benefits across the entire supply chain. In brick-and-mortar locations like stores, outlets and pop-ups, as well as through direct mail and catalog sales and online, whether on a computer, laptop or mobile device such as a tablet or smartphone. From reducing out-of-stocks to cutting inventory carrying costs to improving conversion rates, the metrics are proving to be significant. The bottom line? RFID-based omnichannel solutions are proven to provide the end-to-end inventory control that helps increase sales and profitability while driving crucial omnichannel business benefits.

## Consistent Omnichannel Brand Experiences

In any retail environment, delivering a satisfying customer experience with your brand is job number one. In omnichannel retailing, that experience must be delivered not just in the brick-and-mortar store, but in every channel through every part of the transaction: from online research and information gathering to shopping and purchasing to accurate and timely fulfillment.

Crucial to enhancing customer satisfaction and loyalty is consistent positive interaction with your brand whichever channel the customer is using. RFID technology's unique ability to provide accurate, real-time inventory visibility throughout the supply chain is key to making sure customers are able to find, purchase and receive what they want, when and where they want it, leading to a consistently positive, end-to-end customer experience.



# MOTOROLA RETAIL LEADERSHIP SERIES

This white paper is one of a series examining the challenges, the opportunities and the realities of how technological innovation is shaping the retail industry.



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