TECHNOLOGY SOLUTIONS GUIDE

IN-STORE MOBILITY

Arming associates with high-powered mobile devices not only makes them more productive but supercharges the in-store experience for consumers. Shoppers have come to expect a seamless path to purchase regardless of the channel they choose to shop, and by providing sales floor staff with mobile units retailers are able to bridge the gap between digital and physical shopping. Mobility is the backbone of the digital transformation of the store, without it a seamless, data-rich customer experience is an impossibility.

Q **What analytic opportunities and customer service improvements does in-store mobility offer retailers and what are some of the most cutting-edge ways to leverage the technology?**

NICK D'ALESSIO: Early on, in-store mobile technology offered opportunities for retailers to improve store operations and customer service by equipping the sales floor with digital devices enabling sales associates to engage shoppers and look up product data and availability. Now, a 2016 industry survey of 500 retailers showed that 35% planned to invest in mobile POS, 33% planned WiFi networks, and at least 28% planned to purchase mobile POS software and mobile printers.

Mobile POS systems can be integrated with the centralized network, bringing more improvements. Associates with smart devices and handheld mobile printers can close sales and print transaction receipts on the sales floor, giving customers the speed and convenience they desire. Customer data can feed into a range of

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market analyses and targeted social media, helping pave the way towards omnichannel strategies which effectively link e-commerce and in-store operations to present a unified voice and face to customers. Retailers can mine the data to help determine optimal product pricing for maximum competitive advantage.

DAVID DORF: When you think of in-store mobile analytics, it's helpful to consider mobile devices as a way of tagging people — both customers and employees — to collect insights about shopper behavior, engagement on the sales floor, and the ways that in-store marketing affects traffic and sales. It's the physical world's version of a web cookie that can be tracked and analyzed, which allows retailers to better understand their shoppers' path to purchase, dwell times, queue lengths, and much more. Technologies like WiFi triangulation, Bluetooth low-energy, and even magnetic positioning can track people anonymously, eliminating privacy issues and giving retailers a big picture view of their in-store shopper experience. These data points give retailers the kind of information that can help them improve store layout, market more effectively, and schedule labor in a more efficient way — all of which can improve customer service.

BRIAN HOVEY: One of the top issues facing retailers today is enhancing the in-store shopping experience for their customers

> **INVESTING IN CLOUD-BASED SOFTWARE IS THE BEST WAY TO ENSURE YOU DON'T GET STUCK WITH LEGACY SYSTEMS THAT COULD BE MADE OBSOLETE — BECAUSE FUTURE UPGRADES, MAINTENANCE, AND CHANGES TO SYSTEMS CAN ALL BE COMPLETED IN THE CLOUD, WITHOUT MASSIVE DOWNTIME AND BUSINESS DISRUPTION.**
> **DAVID DORF, VP OF PRODUCT STRATEGY, DIGITAL & CX, INFOR RETAIL**

> **ASSOCIATES WITH SMART DEVICES AND HANDHELD MOBILE PRINTERS CAN CLOSE SALES AND PRINT TRANSACTION RECEIPTS ON THE SALES FLOOR, GIVING CUSTOMERS THE SPEED AND CONVENIENCE THEY DESIRE.**
> **NICK D'ALESSIO, SENIOR BUSINESS DEVELOPMENT MANAGER, BROTHER MOBILE SOLUTIONS**

while boosting profitability. The imperative for traditional retailers is to integrate across all channels — providing customers the same experience online as in their stores, and enabling them to move between channels without friction.

Effective customer loyalty programs are a powerful way to provide retailers with valuable data-driven insights into consumers' shopping habits while encouraging shoppers to spend more per store visit. In fact, research shows that 77% of consumers spend $10 to $50 more than anticipated when redeeming mobile coupons.

Connected workflow solutions, like high performance barcode scanners and mobile computers with integrated imaging technology and voice-directed software, simplify the effort to redeem mobile coupons and speeds up loyalty program enrollment and repeat sales. Many retailers are still challenged with older technologies at the point of customer interaction that do not support the effectiveness of mobile marketing programs.

CORY MCELROY: One of the primary benefits of in-store mobile technology is the ability to empower store associates to better know and serve customers. Store associates are critical to a retailer's ability to deliver a differentiated experience. When they can see a customer's purchase history, wish list, and online shopping cart, it gives them the ability to create a well informed and personalized experience. When an associate knows a particular customer has entered the store and can see the items the customer has been viewing online, the associate can have those pre-staged for the customer to try on and dramatically change the customer's shopping experience moving it from ordinary and routine to unique, convenient and personalized. Mobile technology in the hands of associates opens up an opportunity to share product information, inventory availability and much more enabling associates to not only save the sale but drive the sale. Finally, associate mobile devices enable the capture of customer preferences and purchasing habits which then allows for targeted advertising that has previously been an advantage that e-commerce retailers had over brick-and-mortar.

MICHELLE TINSLEY: Two of the biggest areas of opportunity with in-store mobility is real-time analytics and improved customer service. Associates and managers can use analytics to track sales goals or to see how many customers and associates are in the store, where the hot spots are, and how promoted items are performing.

On the customer service front, mobile devices untether associates from counters and put product information at their fingertips

so they can be stronger brand ambassadors. The same number of staff can serve more customers, and the service is faster and more personal. It's not just about shortening checkout lines, either. Cutting-edge options include clienteling solutions, allowing associates to view past purchases and customer preferences so they can provide more personalized service.

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>
> **BRIAN HOVEY, VICE PRESIDENT AND CHIEF MARKETING OFFICER, HONEYWELL SAFETY AND PRODUCTIVITY SOLUTIONS** "

Q How important is having mobile-equipped sales associates to brick and mortar stores' digital transformation and what are the challenges that retailers face in rolling this out?

HOVEY: To deliver a memorable customer experience and profitably compete with e-tailers, traditional retailers need their store associates to be both more productive and more effective salespeople. Mobile technology empowers store associates to better serve the customer by enabling them to locate product inventory, scan a loyalty card and accept payments from anywhere in the store, all without having to leave the customer's side.

Another benefit of mobile-equipped associates is the reduction of training times associated with hiring seasonal workers. Interestingly, for the upcoming holiday shopping period, "in-store" holiday hiring by retailers is expected to be unchanged, while increasing for transportation, warehousing, and retail supply chain operations. With a mobile device, these temporary workers have immediate access to sales tools such as store promotions and other tools to help increase productivity. In the retail back-end transportation and warehousing operations, workers are also tapping into mobile technologies, including voice-directed pick and pack workflows.

MCELROY: With consumer's use of digital technology continuing to increase, they are enabled more than ever before with in-

formation that influences their purchasing decisions. But what hasn't changed is the consumer's desire to see, touch and interact with a product before purchasing —which is why the majority of purchases still take place in the store. In order to bridge that gap and create the ultimate shopping experience for customers, leading retailers are empowering associates with retail tablets to quickly access product information and selection options, allowing them to meet and even exceed customer expectations. Some of the key challenges that retailers face when deploying mobility tend to be around changes in store operations and customer engagement workflows. Even though these changes are positive, it's still change, and that can be challenging and has to be well managed.

TINSLEY: Ideally, in-store mobility solutions should be a critical element in overall digital transformation projects. It's not simply a matter of adding mobile devices; it's about integrating those devices with the POS and with the back-end architecture needed to support them for years to come. One of the foremost challenges to consider with in-store mobility solutions is security. Retailers need to be certain that the mobile devices they bring in are fully secure.

D'ALESSIO: Having mobile-equipped sales associates is essential to the success of a store's digital transformation. An associate-friendly, store-wide mobile POS/information management system encourages higher levels of cus-

tomer engagement and customer service. By interacting with shoppers using tactics such as proximity marketing, cross selling and up-selling, salespeople can increase the store's sales opportunities, reduce lost sales, and make the shopping experience more convenient and memorable.

Associates are on the front line of customer engagement and their buy-in right from the start is critical. One way to do this is choosing consumer-grade handheld mobile devices — they are familiar, reliable, simple to learn, and intuitive to use. If the digital system is too complicated, associates will hesitate to use it. Also, be sure to provide ample hands-on training before deployment, so they can appreciate how the new system can make selling and customer service easier and more fun — for them and their customers.

DORF: Every retailer needs to equip its employees with mobile devices, but how those devices are used varies depending on the business model. For example, in a high-touch store environment, mobile devices are a crucial tool that employees and customers use together, from the beginning of the sales interaction through the purchase. In a low-touch store environment, mobile devices are more important for employee efficiency, executing inventory tasks, and answering occasional product questions. A fashion retailer, for example, might need mobile devices for both of these environments. The key is making sure the mobile device enhances store processes while staying true to the brand's

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>
> **CORY MCELROY, DIRECTOR OF PRODUCT MANAGEMENT, HP RETAIL SOLUTIONS**

mission. It can be daunting to figure out the balance between mobility and brand, but investing in a harmonious solution always has the best payoff.

Q What factors do retailers need to evaluate when considering the seemingly endless device choices?

TINSLEY: I think compatibility is one of the most critical factors to evaluate. To simplify deployment and integration, retailers need mobile devices that will work with a wide variety of POS software and peripherals. The devices should also support both Windows 10 and Android operating systems. Another key is security. Do the devices offer best-in-class security to protect customers and their data? What specific hardware-based security features do they offer?

It's also important to evaluate the remote management capabilities, which can reduce help desk costs and make it quicker and easier to issue updates and patches. Enterprise-grade wireless capabilities are another must, as well as PCI application support. And of course you want to select devices with enough computing power to support multitasking across multiple applications. To boost employee productivity and operational efficiency, you need powerful devices.

D'ALESSIO: Retailers should choose familiar mobile devices, such as popular name brand tablets, mini tablets or smartphones. Specify mobile label and receipt printers offering compact size, versatility and fast print speeds. And look for flexible connectivity options, such as dual WiFi and Bluetooth.

Retailers should look for mobile printers that can be moved anywhere in the store and offer the battery power to function reliably for the full shift. They need to be able to print high-quality labels and receipts anywhere in the store.

Look for ruggedly constructed industrial label and receipt printing tools engineered to withstand repetitive day-to-day use and deliver long service life. Also be sure that the printers come with a strong manufacturer's warranty. Standardizing on mobile devices across the store or group of stores, will make the mobile POS/info management system easier to deploy, manage and update. It will also simplify training of managers and sales associates.

DORF: The mobile hardware space is changing rapidly, so whatever decisions made today will likely be overturned by new devices in the not-too-distant future. That's why it's important for retailers to select software that is flexible enough to support many different types of hardware. And there's no need to select just one device. Retailers can select a combination of devices that best fits their business processes and strategy. They should be choosing software solutions that support small, medium, and large form-factors, multiple operating systems, and both mobile and fixed devices. Investing in cloud-based software is the best way to ensure you don't get stuck with legacy systems that could be made obsolete — because future upgrades,

maintenance, and changes to systems can all be completed in the cloud, without massive downtime and business disruption.

HOVEY: Meeting the demands of a diverse workforce can seem daunting and complex. Some of the mobile capabilities that we now take for granted weren't even a possibility a few decades ago. If you put in the strategic thinking and hard work now, you can rest easier knowing your mobile environment is doing everything possible to foster employee productivity, increase responsiveness to customers, and conserve costs.

Before making purchasing decisions you need a true understanding of your current state, including your application architecture and business requirements. It's important to think about existing technology investments and to evaluate your competition and what's going on in the industry. Soliciting buy-in from key stakeholders can also result in greater adoption and less frustration later. By aligning your mobility strategy with the rest of your business, you'll create happier employees and customers, and increase your chance of investing in devices that straddle the fine line between cost-effectiveness and user acceptability that will serve your organization well now, and into the future.

MCELROY: There are numerous factors that should go into mobile device selection. First the specific use-cases, benefits and value need to be identified and then these factors can be translated into specific device functionality specifications. Other factors like store size and format, operating hours, target audience and associate requirements also need to be considered in order to determine how the device needs to function. For example, will the device just be used by the associate for inventory look-up and price checks or is there a need for the associate to share the screen with the customer to assist with product color selection? Factors like this are important because they help to identify the type of de-

vice that will be ideal to provide the desired benefit and value that the retailer is looking to achieve. From a technical perspective, leading retailers look for devices providing that can be easily integrated into their retail operations and can be easily supported by the IT organizations. Operations should be looking for a device with good ergonomics and one with good durability suited for the demanding retail environment.

> **" I THINK COMPATIBILITY IS ONE OF THE MOST CRITICAL FACTORS TO EVALUATE. TO SIMPLIFY DEPLOYMENT AND INTEGRATION, RETAILERS NEED MOBILE DEVICES THAT WILL WORK WITH A WIDE VARIETY OF POS SOFTWARE AND PERIPHERALS. "**
>
> **MICHELLE TINSLEY, DIRECTOR, MOBILITY & SECURE PAYMENT SOLUTIONS, INTERNET OF THINGS GROUP, INTEL**

Q **Mobility technology is removing barriers along the shopper's journey, how is it continuing to evolve to truly deliver a seamless customer experience?**

DORF: The true measure of a seamless shopping experience is consistency across channels and devices with minimal friction. If a customer can create a basket online, move it to their phone to shop in-store, and finally move it to an associate's tablet for checkout, then the experience is pretty seamless. The next step is ensuring that your marketing participates in that journey in a similar fashion, adding value with useful recommendations and relevant offers. Having a single engagement platform that manages the experience across all touchpoints is where retailers are heading.

D'ALESSIO: One area in which mobility has not yet been fully exploited is tapping the mobile POS system's integrated data analytics and mobile printers to expedite pricing transparency and consistency. Many retailers experience a gap between the time a price change is approved at corporate to when it is actually executed on store shelves and merchandise. This can have a negative impact on sales and customer service. Simply defined, price optimization and management means finding the right balance and the right timing of pricing adjustments. Whether for a planned promotion or on-the-fly response to a competitive threat, price

changes need to be timely and fast. Smart mobile printers enable floor personnel to quickly print updated shelf labels and merchandise tags, which closes the time gap. A successful price optimization strategy helps drive margin gains and sales improvements, but constraints limit the ability to take all suggested price changes. In-store optimization technology enhancements open the door to recapture lost profit opportunities by removing constraints and ensuring that the most profitable changes are prioritized and executed first.

MCELROY: Mobile technology is evolving at the speed of light and is becoming increasing smart and capable of automating so many facets of a consumer's day-to-day life. When you combine the power of mobile and new form factors such as wearables with other technologies like beacons, NFC, RFID, etc. the possibly of a seamless experience become nearly infinite and mobile technology becomes more of a life accessory. New mobile technology platforms not only empower the individual consumer and the associate, but advancements in devices, software and operating systems are taking mobility to new heights, driving shared and social experiences previously unthinkable. In these ways, mobility and in particular retail mobility is helping to bring people together and making experiences truly seamless and automatic.

HOVEY: Increasingly, brick and mortar retail stores are morphing into supplemental distribution centers to support e-commerce

fulfillment by leveraging available in-store inventory for customer pick up or delivery. Mobile solutions are supporting these efforts while enabling additional sales opportunities when customers arrive to pick up their 'click and collect' items.

Retailers can optimize worker productivity by leveraging many of the technology solutions that distribution centers use for order fulfillment. For example, voice-directed software can improve a store associate's task routine to help make in-store pickup of online orders a more profitable venture. By improving order fulfilment and shelf stocking tasks, workers using voice solutions can create efficient movement of product from back-of-store to shelves.

TINSLEY: It really is an exciting time as we see in-store mobility solutions fundamentally altering — and improving — customers' in-store experiences. Certainly one area where we'll continue to see rapid advances is in the personalization of the shopper's experience. Clienteling and concierge solutions create a powerful opportunity to cater to the desires of top customers. The better you know your customers, the easier it is to up-sell and add services linked to your brand.

As associates and managers become more familiar with the analytics available through in-store mobility solutions, we're also likely to see advances in that space. The ability to look up products, view competitive pricing, check inventory, and place orders on the fly is exciting — and we'll see more applications and greater customization in the future. **RIS**

COMPANY NAME/ WEBSITE	RELEVANT PRODUCT/SOLUTION	KEY CLIENTS
Aptos, Inc. www.aptos.com	Aptos Mobile Store (Point of Sale)	BCBG MAXAZRIA, Fossil, Orvis
Brother Mobile Solutions www.brothermobile solutions.com SEE AD ON PAGE 25	RuggedJet Series Mobile Label and Receipt Printers – 2", 3" and 4" models	N/A
Cayan www.cayan.com/genius	Warehouse & Inventory Planning Suite	N/A
Celerant Technology www.celerant.com	Celerant Command Retail	CATO, Robert Wayne, Tennis Express
Comcast Business https://business.comcast.com/ enterprise SEE AD ON PAGE 23	Comcast Network Services	N/A
Cradlepoint www.cradlepoint.com	Cradlepoint AER Routing Platforms with Enterprise Cloud Manager	American Apparel, David's Bridal, Evereve
Direct Source www.directsource.com	Technology Solutions Provider for Tier-One Retail	N/A
ECRS www.ecrs.com	Catapult - Retail Automation Suite	Eataly, McCaffrey's Food Markets, Piggly Wiggly Express
Elo www.EloTouch.com	Interactive Touchscreen Computers, Monitors, Displays and Software	Dominos, Living Spaces, Lowe's
Epson America Inc. www.epson.com/cgi-bin/ Store/sp/pos/index.do	Epson TM-m30 POS Receipt Printer	N/A
Honeywell https://www.honeywell aidc.com/ SEE AD ON PAGE 27	Point of Sale (POS); Customer Engagement; Mobile Marketing; Store Operations (Omnichannel)	N/A
HP www.hp.com/go/pos SEE AD ON PAGE 29	HP Pro Tablet Mobile Retail Solution	N/A
Hughes http://business.hughes.com/ industries/retail	Hughes HR4700 with ActiveTechnologies	Carter's, BonTon, OneMain Financial

COMPANY NAME/ WEBSITE	RELEVANT PRODUCT/SOLUTION	KEY CLIENTS
Infinite Peripherals www.ipcmobile.com	Linea Pro and Infinea Tab M	Major Coffee Retailer, Major Wireless Retailer
Infor www.infor.com **SEE AD ON PAGE 21**	Converged Commerce, Demand Management, Supply Chain Management Suites	Whole Foods, Home Depot, Abercrombie & Fitch
Intel www.inte.com **SEE AD ON PAGE 19**	Retail Mobility	N/A
Island Pacific www.islandpacific.com	Island Pacific SmartStore	The Dune Group, rue21, Nasty Gal
Jesta I.S. http://go.jestais.com/	Vision Store Mobile	Ferrioni, Harry Rosen, Town Shoes
Kliger-Weiss Infosystems, Inc. www.kwi.com	KWI Cloud 9 Retail Technology Platform	Brighton Collectibles, Pandora, VF Corporation
NCR www.ncr.com	NCR Sales Advisor, NCR FastLane Mobile Shopper	N/A
OneView Commerce www.oneviewcommerce.com	OneView Digital Store Platform	Discount Tire, Travis Perkins Wickes, O2
Reflexis Systems, Inc. www.reflexisinc.com	Reflexis Task Manager, Reflexis StoreWalk, Reflexis Employee Self Service (ESS), Reflexis Workforce Manager, Reflexis StorePulse	QuickChek, Vera Bradley, Weight Watchers International
SAP www.sap.com	SAP HANA Cloud Platform SDK	Hallmark, Swarovski and Ulta
StepsAway www.stepsaway.com	SAConnect	Express, Sephora
TouchCommerce, now a part of Nuance Communications/ www.touchcommerce.com	RightTouch Engine (which powers many products/ solutions like TouchChat and TouchStore)	Dixons Carphone, Virgin Media, Total Gym Fitness
UTC RETAIL www.utcretail.com	ReadyStore	Country Curtains, Dunn Edwards, Lenox
Verifone www.verifone.com	Verifone's e355 Mobile Payment Solution	Over 80% of Tier 1 Retailers trust Verifone