

A RETAIL RAY OF LIGHT

Beacons are poised to boost shopper experiences in stores

by M.V. GREENE

New “beacons” are changing the game in bricks-and-mortar retail stores. Viewed by retailers, technology companies, manufacturers, brands and marketers as an easy entry into the souls — and wallets — of consumers, beacon platforms use low-energy Bluetooth signals to send messages to mobile devices.

Beacons — essentially battery-operated, quarter-sized sensors — can pinpoint where shoppers are in a store, how long they have been in a particular location or how often they visit. So as a shopper in the electronics department of a big-box store mulls over a purchase, the store can communicate a discount offer or product information in order to spark the sale.

This means retailers can realize an “unprecedented ability” to facilitate communication with consumers, says Hilmi Ozguc, CEO of Swirl Networks, a provider of marketing networks for beacon platforms.

“This is something that major retailers and brands have wanted for a long time — the ability to tap, virtually, their consumers on the shoulder right at that moment of truth when they are making a purchase decision and sway them one way or the other,” Ozguc says. “That’s never been possible before.”

Erik McMillan, CEO of beacon technology provider Shelfbucks, says beacons are akin to retailers enveloping the store with a “digital window.”

“Shoppers now can engage with the store almost like clicking a mouse, by using their phone,” McMillan says. “They are clicking their mouse all around your store and you’re able to bring them digital content over those beacons.”

Apple built beacon technology into its iPhone 4S smartphones a few years ago; in



2013, Apple added support for the technology to its iOS 7 software release and branded it “iBeacons,” enabling transmission to an estimated 200 million iOS devices across beacon platforms.

Later in 2013, Apple further accelerated the stature of beacons by running them in its retail stores, where shoppers could receive updates to their devices on their upgrade status. Other manufacturers followed Apple’s path, building beacons with the capability to send messages at a nominal cost to Apple smartphones and tablets as well as newer Android devices. Philip Gerskovich, senior vice president for new growth platforms with Zebra Technologies, says the technology is enabled by a new version of Bluetooth that transmits signals at very low power levels.

“Suddenly, you could take those Bluetooth chips and put them in these little plastic containers and stick them around your store with battery power that would last for years,” he says.

Gerskovich adds that beacons offer the capability to exponentially advance the retail industry’s mobile retail objectives. His company’s

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Zatar platform integrates iBeacon services with in-store displays. From a hardware perspective, the ground already has been set since the technology is embedded in later-generation smart devices, he says.

'SCALABLE' PERSONALIZATION

In most current deployments, beacons are placed throughout the store as "digital touch-points" on shelves, signs and product displays. They are attracting the interest of retailers across industry segments.



Beacon vendor inMarket announced in January that it was rolling out the technology at 200 Safeway and Giant Eagle locations in Seattle, San Francisco and Cleveland, initially placing them at store entrances to make offers to shoppers as they walk in.

In February, Tarrytown Pharmacy in Austin, Texas, rolled out Shelfbucks' beacon platform. Shoppers can receive real-time offers and coupons on their smart devices. McMillan calls such interactions "scalable customer personalization."

"You can give [shoppers] a better experience and give them an offer or something that can alter their demand right now," he says.

Bricks-and-mortar stores will realize a number of measurable benefits through in-store personalization, McMillan says, including combating loss of sales to online players while increasing shopper loyalty, store visits, cross selling and category spend.

The technology can track sales increases in

particular store categories, McMillan says. "If you can prove that a shopper interacting with a beacon increases the amount of money they spend in [a] category, it becomes very compelling."

With the hardware puzzle solved through smart devices, retailers need to invest in customized smartphone and tablet applications to trigger beacon platforms and a software framework to tie together transmissions with store merchandising, Gerskovich says.

"We don't have to wait for something new to be invented for beacons to be deployed in stores," he says. "At that point, it really becomes a question of the stores figuring out how they want to message to their customers."

INTEGRATION CHALLENGES

The euphoria over beacon platforms doesn't mean challenges don't exist.

Maria Fernandez Guajardo, vice president of product management at retail analytics firm RetailNext, says integration with back-end retail systems will be among the greatest considerations for retailers. Many will see beacon platforms as a means for bringing "a bit of mobile and e-commerce to the bricks-and-mortar retailer," she says. Yet that might be too simplistic of an approach.

"I kind of see it the other way around," Guajardo says. "I think that it has to do with a new shopper that has appeared on the scene who is really used to buying online."

That new shopper, according to Guajardo, is a Millennial — at ease with using technology tools and wanting to extend that use to physical stores. It is a group that avoids most printed promotional supplements in the search for deals.

"It's just the way they are," she says. "They know how to browse. They know how to find the product. They read the reviews. They feel uncomfortable even talking to associates. They are used to one-click checkout. That's the way that they shop."

Thus retailers, as they figure out their positioning with beacons, might approach the opportunity as bringing the best of bricks-and-mortar to the e-commerce experience.

"Now you can browse and you can shop with all the benefits of online, but you have the benefits of bricks-and-mortar, which is instant gratification. You can take the merchandise with you," Guajardo says.



Another key challenge for beacons will be balancing the opportunity against consumer privacy. Micro-location technology stirred up controversy in 2012 and 2013 when retailers began to tap Wi-Fi signals to gather anonymous analytics data on shoppers by tracking their movements in malls and stores. Privacy advocates cried foul, despite retailers' contention they were gathering data to improve operations in a manner similar to online retailers.

In one case, a department store chain that began piloting micro-location technology in a few of its stores in 2012 caught criticism over privacy even though it posted signs and advised shoppers they could turn off their devices and not be tracked.

FUTURE REGULATION?

In February, the Federal Trade Commission held a hearing in Washington, calling in retailers, technologists, privacy advocates, attorneys and others to examine micro-location and mobile tracking as part of a series of sessions reviewing new technologies and how they impact consumers. While the commission's goal was to gain understanding of the technology, it signaled to many in the retail industry that regulation is a possibility.

The Electronic Frontier Foundation, a non-profit that bills itself as "defending civil liberties in the digital world," was among the critics. Senior staff technologist Seth Schoen called using phones to pinpoint consumers' location "something that people are taking advantage of" and said it "should be viewed as a security problem."

Swirl Networks' Ozguc says the technology is so new the prudent course should be self-regulation as retailers get their arms around it. Otherwise, the government is likely to step in.

"It's best always when the industry self-regulates. I think the industry should be given a chance to do that," he says. Ozguc favors giving consumers the choice of whether to opt-in, though the National Retail Federation questions whether that's necessary.

Mallory Duncan, NRF senior vice president and general counsel, told the hearing that government regulation or even voluntary guidelines some have proposed would be premature because the technology is still developing.

Using smartphone signals to see where lines are forming, for example, is no different than doing the same thing visually, he said.

"There's a lot of discussion in this field about 'tracking,'" Duncan said. "One could just as easily substitute the word 'observing' and it sounds less scary. The question is do you have to give notice for 'observation?'"

Duncan said using new technologies to deliver "service and attention" to customers encourages robust in-store shopping experiences.

"We use [technology] to understand our stores and their operation. You are striking a balance, maximizing the store's effectiveness, which increases your ability to compete with others, and, at the same time, you can't go so far in doing it that you destroy the trust that is inherent in bringing people in so they want to shop in your store," he said. "We are using the tools to find the best possible balance between those two."

As retailers experiment with the nuances beacons can offer, observers say the platforms could start to gain ubiquity in stores within two years. McMillan of Shelfbucks foresees 2014 as a period of heavy testing to determine how the technology works best, particularly among major retail chains, followed in the second half of 2015 by an explosion of deployments.

Nick D'Alessio, global retail practice leader for Zebra Technologies, predicts that as beacon technology moves forward it has the potential to dramatically change the operational nature of retail stores, including spurring the development of contactless payment protocols that companies have sought to advance in recent years.

D'Alessio expects industry segments like apparel and specialty stores that lend themselves to personalization with shoppers will pave the way for adoption in the short-term.

"With these technologies in the aisle dynamically, whether it is with a public display or a provided application on the phone, you are now able to help customers by identifying them," he says. "You'll be able to walk up to somebody and help them shop for clothing knowing what they purchased in the past and what their tastes are much like you preemptively can do online." **STORES**

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