

**Business**

# 5 new technologies that may change how you shop

By **Sarah Halzack** January 14

As more shopping moves online, retailers are looking for ways to step up the in-store experience to make sure it remains compelling and convenient.

The retail industry descended on New York this week for the National Retail Federation's Big Show, an annual trade event where vendors showed off the innovative offerings that they hope will soon become commonplace in malls across the globe.

Some of the technology on display seemed a long way from ready to appear at your local shopping center or supermarket. But other innovations are already in use at chain stores right now, and they could change the way you shop.

Here's a roundup of what they are and how they work.

## **Toshiba TCxAmplify**

Put simply, this technology enables you to do self-checkout at the grocery store using your smartphone. Toshiba's technology is built into the app of your favorite supermarket. You scan your items as you put them in your cart and once you're finished shopping, you simply wave your phone in front of a computer. Your whole list of items is displayed on screen as though you just went through a traditional checkout aisle, and

the loyalty program discounts have already been applied (assuming you linked up your loyalty card with the app). You can then pay for the purchase using a credit card or a digital wallet such as Apple Pay.

TCxAmplify, which is in use at some Shop-Rite groceries, speeds up the checkout process and eliminates many of the frustrations of current self-checkout systems. But it has some key challenges to adoption: It still requires consumers to download a store app, something they have often been hesitant to do for all but their favorite few brands.

### **Intel MemoMi MemoryMirror**

Ever had that moment in the dressing room when you just can't decide whether you want that new sweater in the blue or the red? Enter Intel's smart mirror, which is currently used at Neiman Marcus stores. Using hand gestures, shoppers can change the color of their outfit on screen and can even compare two looks side-by-side.

The smart mirror was impressively fast at toggling between different looks and, unlike other technology in this category, the movement and wrinkling of the fabric was reflected realistically on screen. One caveat: The orange-y red sweater you see in the mirror was actually more of a fire engine red in person, suggesting the color display might not be perfectly precise.

### **Panasonic Powershelf**

There are few things more frustrating than scrambling over to your local grocery store just before it closes, only to realize they are out of that rice vinegar you wanted for your stir-fry recipe. The Panasonic Powershelf indirectly fixes this problem for shoppers by helping retailers reduce their out-of-stocks. In this system, a weight-sensitive mat is

placed on a shelf. When a shopper lifts the last item off the shelf, a store employee instantly gets a text message notifying him or her of the exact product that needs to be restocked.

Powershelf also includes digital price tags, which allow the retailer to change their prices on the fly. If, say, a grocery store realizes it has a glut of bananas it need to sell before they spoil, it could drop the price instantly across its whole system or in one specific store. That's a great deal more efficient than changing paper price tags, especially at a supermarket that has thousands of different items for sale.

Powershelf is currently in use at 40 Whole Foods Markets. Because the technology relies on electrical inductive power, not batteries, it can even be used in a grocery freezer.

## **Shelfbucks**

Data shows that the majority of shoppers are now researching their purchases on the Web before ultimately acquiring the item in the store. Shelfbucks aims to make it easier to conduct your online research in-store.

The display you see below is being piloted at Gamestop stores in Texas. Customers with the Gamestop app can hold their phone over the beacon device on the shelf and get access to a range of product reviews and other details about the game. As the signage specifies, customers can also get access to discounts on that item.

While many stores are deploying beacons to push coupons to shoppers' smartphones, Shelfbucks believes this tactic is ultimately equivalent to sending a spam e-mail.

Instead, their approach is to make the consumer be proactive about conducting research

and accessing coupons, a set-up that might have particular appeal to those concerned about privacy.

## **Microsoft's fast-food self-ordering kiosk**

At first glance, this technology may seem a little frivolous: Is it really that inconvenient to order a burger from a sales associate at a fast-food restaurant? Is this really solving a problem for the customer—or the retailer, for that matter?

But Microsoft says its deployment of the technology at some Hardee's restaurants is yielding a noteworthy result: Average check size is up in those restaurants as some 40 percent of kiosk users accept an up-sell option such as “Would you like to round your amount to \$20.00 and we'll add a chocolate chip cookie?”

If Microsoft continues to see similar results with other clients, look for this technology to become more widespread. Fast-food is not a high-margin business, and chains will be looking for any way they can to sell you more food.

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