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Megatrends in the retail & consumer products industry



Using tech breakthroughs to connect with customers

Highlights

- Powerful smartphones, connected sensor technologies, and mobile apps are transforming the shopping ecosystem—and changing how retail and consumer companies interact with customers.
- Brick-and-mortar retailers are adding in-store technologies to take advantage of digital engagement and marketing capabilities.
- Retailers are leveraging new technologies to meet customer demand for convenience and a personalized shopping experience.
- Consumer packaged goods companies are embracing new technologies for smart packaging, social selling, and enhanced operations.

The future of shopping: Smartphones, mobile apps, and sensors

Technology has been a profound force for change over the past decade as wireless connectivity, cloud computing, mobile applications and data analytics have transformed the shopping ecosystem. In the near future, smaller, more personal technologies—smartphones combined with connected-sensor devices, in particular—will likely drive big changes in the ways consumers shop and how retail and consumer companies interact with them.

The nexus between increasingly powerful smartphones, integrated with personalized mobile applications that generate data about consumer behavior, and sensor-based technologies is already producing sweeping changes in the shopping experience.

Many brick-and-mortar retailers provide interactive maps that shoppers can view on smartphones to locate product departments, checkout counters, food courts, and more. By adding location-based tools, retailers can wirelessly beam coupons, deals, and promotions to smartphone users. In effect, these technologies enable them to tap into the same digital marketing and engagement opportunities that online retailers have so successfully leveraged.

An example of an end-to-end proximity platform that seamlessly connects smartphones, mobile apps, and corporate information systems is Apple's iBeacon. Here's how it works: Retailers install hardware devices called beacons that can identify a customer's device as she enters a store and push personalized content based on the shopper's profile and current sales and promotions. As the shopper enters the children's clothing department, for instance, she may receive notification of a sale on kids' sneakers in aisle four.

Online retailers are developing their own class of game-changing technologies. Amazon.com recently debuted the Amazon Fire, a smartphone that comes loaded with a product-recognition app. Amazon Fire smartphone users snap a photo of a product and the Firefly app analyzes the image and provides links to the product on Amazon.com. The online retailer says that Firefly can recognize more than 70 million products out of the gate. Consumers need only to click one of those links to initiate a purchase.

How new technologies can help retailers meet customer demand for convenience and product information

While online shopping breakthroughs have made it effortless to buy almost anything, anywhere, and at any time, it seems unlikely that consumers will completely abandon physical stores and shopping malls in the foreseeable future. But the continuing expansion of e-commerce will demand that physical retailers leverage new technologies to improve the customer experience and meet evolving expectations for convenience and information.

One of the best examples can be found on London's Regent Street where luxury retailer Burberry has integrated technology throughout its flagship store. To create a shopping experience that is both entertaining and data-driven, the company has sewn radio frequency ID (RFID) chips into Burberry garments. When a customer tries on one of its signature trench coats a mirror displays information on how the garment was made alongside fashion runway images and other data.

It's all about creating the type of digital engagement in the physical store that customers can experience online. "We wanted, when you walked into the Regent Street store, to feel exactly the same atmosphere, [for you to be] able to engage with it in the same way that you might be able to engage online," said Christopher Bailey, Burberry chief creative and chief executive officer.¹

Lowe's, the home-improvement retailer, has a slightly more futuristic vision. It has harnessed 3D and virtual reality technologies to create an experience called the Holoroom that can help customers visualize a remodeled bathroom.

"We know that for many homeowners, the struggle to visualize a completed home-improvement project can stop a project in its tracks," said Kyle Nel, executive director of Lowe's Innovation Labs. "The Holoroom is our solution, enabling consumers to visualize their project."²

When the Holoroom debuts later this year in two Toronto locations, shoppers will first enter the dimensions of the bathroom on a tablet, then add components like furniture, appliances, countertops, and flooring. They can then take the iPad to the Holoroom to view and experience the renovation in 3D. They can also take it home: Lowes will offer apps that enable shoppers to view the room design on their smartphones and tablets.

Time-saving conveniences

For many consumers, saving time is almost as important as saving money. Consequently, retailers are implementing technologies that boost convenience for hurried shoppers.

That's why grocery retailer Kroger Co. has combined infrared sensors above checkout lanes with data analytics to help reduce the average wait time. The company has installed the system in 2,400 stores and says it has cut checkout waits to 30 seconds on average—down from 4 minutes before the technology was deployed.

Similarly, Walgreens is testing an in-store service in conjunction with a provider of medical lab services that enables customers to quickly and conveniently have blood drawn for lab

Retailers are adding in-store technologies that can create the same type of digital marketing and engagement opportunities that online merchants have successfully leveraged.

testing.³ Using a tiny lancet, a technician pricks a customer's finger to collect a few drops of blood. Analysis and communication are automated, and physicians receive test results within hours.

Dollars from devices

The ability to use smartphones for in-store payment is a convenience that has long been promised. Retailers like Starbucks were early out of the gate with apps that enabled customers use smartphones to pay for their lattes, and we're starting to see other types of merchants offer the same convenience.

ExxonMobil has been testing a payment system that enables customers to encrypt and store their ExxonMobil credit card in the company's Speedpass+ smartphone app. When a customer pulls into a participating location, the app employs geo-location services to offer a range of gas pump numbers to choose from and the ability to authorize the purchase; payment is charged to the credit card and a receipt is sent via e-mail.

¹ Mashable, [Why Burberry Wants to Bring the Online Experience to Stores, and Not Vice Versa](#), Sept. 24, 2014

² Lowe's, [Science Fiction Inspires Lowe's Holoroom and Home Improvement Innovation](#), June 11, 2014

³ Theranos, [Theranos Selects Walgreens as a Long-term Partner Through Which to Offer Its New Clinical Laboratory Service](#), September 9, 2013

Consumer goods companies are exploring smart packaging, social selling, and digitally enhanced operations

Consumer goods companies are also embracing technologies that enhance the shopping experience. In the near future, expect to see digital packaging innovations that offer a wealth of information about products.

For instance, manufacturers may implement technologies that provide details on the origin and freshness of food products, much like RFID has done for pharmaceuticals. Using a smartphone, shoppers could scan an apple and find out not only when and where it was harvested, but also view dietary information and the most popular recipes for the current season.

Smart packaging may evolve to more sophisticated interactive capabilities that help shoppers find products of interest as they pass in-store sensors. Individuals with diabetes, for example, may receive alerts as they approach diabetic-friendly merchandise.

Getting social with sales

As more consumers embrace social media, evolving use patterns will shape the ways that shoppers find, purchase, and rate products and services.

Social shoppers not only swap product likes and deals with online friends, but they also have begun to seek the advice of digital influencers—individuals with expertise in a certain type of product and a broad social media following. As these influencers reach more potential shoppers, retail and consumer goods companies have launched initiatives to connect with them and provide products for evaluation (and hopefully raves on blogs and social media posts).

That's just one way that social media is making the introduction and promotion of new products easier for some consumer goods companies. Social promotion is also less costly than

traditional forms of advertising and the barrier to entry is low. These two factors have enabled small start-ups to introduce and promote products that go head to head with similar items marketed by larger, well-established product manufacturers.

Many consumer goods companies recognize the power of social media and are investing accordingly. "Social media makes new players just as relevant to consumers as our brands," said Don Mulligan, chief financial officer of consumer goods giant General Mills. "It's all about being in the mix with consumers. We have seen a marked increase on our spend in online media."

New technologies & business models

New technologies that combine sensor-enabled consumer products and smartphones could create entirely new business models and services for some consumer products companies.

Consider Nike. The manufacturer of athletic goods has created a line of Nike+ apps and gear that monitor fitness and health by measuring distance, pace, time, and calories burned during daily activity. The company offers apps for running, basketball, soccer, skateboarding, golf, and personalized fitness programs.

This, in effect, has put Nike in the business of helping consumers stay healthy, while burnishing its brand. The company says that 15,000 people register with its Nike+ app each day, and also notes that Nike+ members spend "significantly more" on its products.⁴

⁴ AdAge.com, [Ten Things We Learned From Nike's Investor Day](#), Oct. 9, 2013

The popularity of these sensor-based fitness devices is just the tip of the iceberg. Other wearable technologies in use include medical sensors that remind users to take medications, monitor health conditions, or help improve sleep patterns. As consumer and medical devices converge with mobile apps, the ways that individuals shop for health and wellness products will very likely be transformed.

We also are seeing retailers and CPG companies exploring the use of sensors to improve operations, an approach that we believe represents tremendous opportunities to boost efficiencies. Applications include ensuring shelves are well stocked, confirming that store displays are ideally arranged, and identifying how consumers respond to promotions and store layout on a real-time basis so promotions and pricing can be modified accordingly.

Toward new value

It seems all but certain that advances in smartphones, sensor-based technologies, and data analytics will transform the shopping experience in the near future. Many retail and consumer goods companies are grappling with how these developments will affect consumer expectations and interactions as well as the supporting business model.

Companies that take advantage of these advances will be those that understand the implications of new technologies and apply them to deliver a new value model, whether that is an enhanced in-store experience, better customer engagement, or increased convenience.

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Upcoming Megatrends Insights

- How shifting demographics will change the ways products and services are packaged, marketed, and sold.
- As urbanization accelerates, new customer preferences will alter business models and marketing strategies.

