Accenture Labs
Connecting In-Store and At-Home Experiences
Digital technologies link two spheres of shopping
Retailers have taken big steps in using digital technologies to create connected, integrated and convenient shopping experiences for customers. Yet these experiences are missing a vital link between the two locations where customers shop the most—in the store and at home. Using emerging digital technologies to connect these two spheres can boost the customer’s experience, as well as the retailer’s profit margin and overall growth trajectory. Examples include using an Internet of Things device in the kitchen to scan and add items to a digital shopping list, or enhancing the car buying process using a mobile augmented reality display to interact with a 3D automobile parked virtually in the garage.¹ Retailers that focus on connecting in-store and at-home experiences at each stage of the purchase process can ultimately deliver one highly differentiated and seamless experience.
Beyond social and mobile, advanced digital technologies—such as networked sensors, robotics, 3D printing and wearables—are beginning to appear in people’s homes and personal lives, bringing the online and physical worlds even closer together. However, in the retail space the in-store and at-home experiences are still largely disparate.

In-store experiences focus primarily on products inside the store, improving navigation, convenience or interaction. Safeway, for example, uses beacons and a mobile app to guide shoppers to the right aisle and delivers coupons for nearby items.² Kohls installed kiosks to help customers order products not available in the store to be delivered at home.³ And Target Open House duplicates a home environment in the physical store, providing a showroom for customers to interact with smart door locks, night lights, pet feeders and more.⁴ But none of these advances sustain the connection directly into the home.

At the home itself, customer experiences are mostly limited to online shopping via computers or mobile devices. Although retailers are rightly investing to strengthen the online channel, research shows that customers still prefer the brick and mortar experience for certain aspects of shopping, such as the ability to talk to knowledgeable sales associates.⁵ In addition, a third (37 percent) of customers who use the “buy online, pick up in-store” (BOPUS) service tend to purchase additional products while they are retrieving items in the store.⁶ This disconnect presents an opportunity to take into account a customer’s context outside of the store, particularly what products and services could be useful at home.

Regardless of the location, customers all have the same 24 hours in a day and only so much of it can be spent shopping. In the US, an average of .74 hours/day is spent purchasing goods and services, while an average of 1.77 hours/day is spent doing household activities.⁷ Providing useful services in the home and at the store would more closely link the two places, making the shopping experience more convenient for customers and the engagement time more meaningful for retailers. (For more information, see our point of view, “Engaging Customers through Seamless Lifestyle Experiences.”) Retailers can also use emerging technologies to combine the two experiences into one that is both more efficient and enjoyable. This would make it easier for customers to take action at the point-of-decision, find relevant products and services, pay for items quickly and securely, or benefit from more convenient fulfillment and service options.

While most retailers are investing in developing their in-store or at-home experiences, there are significant, untapped opportunities to make connections with customers by crossing the two spheres of influence. Those that effectively link the two can create engaging and compelling experiences for customers—a distinct advantage over competitors.
Opportunities to link the store and home

Accenture Labs believes there are possibilities at each stage of the customer experience cycle for retailers to use digital technologies and develop a distinctive, connected shopping experience between the store and home (see Figure 1). Depending on their strategy and objectives, a retail company can choose to focus on one area or blend elements of all stages to transform the customer experience.

Entry points into the customer journey, along with examples of innovative applications of digital technologies, include:

**Engage**

Lower barrier for customers to take action as needs are assessed (point-of-decision). Retailers can extend their reach into customers’ homes and support their activities when customers realize they need a product. In an effort to become part of the kitchen experience, for instance, Australian supermarket Coles has trialed an Internet of Things device called “hiku,” which conveniently attaches to a refrigerator with a magnet. Customers can scan the barcodes of items or say the name of the product using voice recognition technology. The hiku device automatically updates a digital shopping list for their next trip to Coles. In another example that extends into any room in the home, retailers can engage with customers using Zenbo, a robot that delivers spoken reminders, helps with online tasks like shopping, controls smart home devices and more.

**Discover**

Use insights and technologies to develop more relevant products and deliver better customized services. Retailers can offer customers opt-in services to collect and use data available in the home to generate personalized recommendations. To help customers maximize their wardrobes, for example, retailers could partner with a company like ClosetSpace that provides styling services to organize existing clothes, receive custom outfit suggestions and find deals for new complementary items.

In the future, a social aspect could be added to a styling service, enabling family and friends to purchase items from a consumer’s closet wish list. Retailers could also offer a similar branded discovery service as Neiman Marcus has done with its image recognition app that allows customers to snap a photo of any item of clothing and instantly be provided with links to Neiman Marcus’ website for items that most closely match.
Another discovery option is for retailers to use digital technology to deliver contextualized suggestions to customers. Appliance manufacturer LG has embedded intelligent technology into some of its refrigerator models to take the guesswork out of grocery shopping.¹² While at the store, customers can use HomeChat to text questions to their fridge and determine if they are low on items such as milk.¹³ At home, family members can use the appliance’s built-in touch screen to, among other tasks, generate a digital shopping list from a recipe displayed on the screen.¹⁴

Transact

Make checkout quicker, easier and more secure. People increasingly appreciate the convenience of mobile payment services, such as automatically charging their account for using a car-sharing service. These pre-approved and unified transactions will soon expand into the home, providing retailers with new ways to connect the two experiences. Apple Pay and Google Wallet already allow customers to pay for items without using a physical credit card. Likewise, connected car services are beginning to enable customers to pay for gasoline or order dinner to be delivered.¹⁵

In the future, retailers will have opportunities to smooth transactions by using the same security technologies and practices both in the store and at home. The Nymi Band, for example, uses biometrics for authentication to applications, devices or services.¹⁶ Retail companies could partner with a wearable device company to provide a seamless and secure checkout in the store and a connected experience at home to unlock doors or access computers.

Operate

Analyze consumer behavior, purchases and inventory data to inform the shopping experience. Digital technology has made it easier for retailers to track customers’ online and mobile shopping habits using cookies and apps, as well as in-store behavior with a combination of beacon technology and video analytics. As services venture into the home, it is already becoming possible for retail companies to collect data from robots, smart appliances and other devices to determine how customers actually use products. However, as Consumer Reports investigated, customers might be upset to learn that their smart TVs and other in-home connected devices can also transmit personal conversations to a third-party company for analysis.¹⁷ Companies may have the best intentions in mind to tailor future offers and advertisements, but odds are that customers will see the matter as an invasion of privacy.
In order to maintain digital trust, there is an essential caveat: retailers must consider the ethical consequences of data usage, obtain up-front consent to collect in-home data from customers, and specify how they will use the information to make their lives easier and shopping more convenient. (For more information, see the Accenture Technology Vision 2016 chapter on Digital Trust or the Accenture Data Ethics research report.)

**Service**

Schedule, deploy and fulfill delivery on time with fewer costs and full transparency to track items. Retailers can take advantage of digital technologies to make it faster and easier to fulfill orders at home and in the store. Amazon, for example, has a patent¹⁸ to apply machine learning technologies to its big data in order to predict orders based on customer’s product searches, page visits or wish lists; the retail supergiant could potentially pre-ship items to a warehouse closer to the customer in anticipation of their online purchase.¹⁹ Luxury fashion retailer Kate Spade is using touch-enabled screens to create a temporary shopping storefront while a new store is under construction.²⁰ Customers can purchase handbags or other accessories and ship the items to their homes. And home retailer Lowe’s is offering a service that scans and 3D prints parts that are out of production —and sends the items directly to customers’ doorsteps.

In terms of delivery, robots and drones can be used to transport items so that customers do not have to leave home. Walmart, for instance, is now seeking Federal Aviation Administration permission to fly drones outside in residential neighborhoods in order to deliver packages.²² Customers could more easily buy items, try them on and return what they do not want or need. A retail pharmacy could also use this technology to deliver medicine or other products to home-bound customers.

Tapping into crowdsourcing is yet another way for retailers to partner with services that expedite delivery options to the home. As just one example, the Hitch app service connects companies (i.e., retailers, logistics, quick service restaurants) to individuals who input their travel information, either daily commutes or long-term business or leisure trips.²³ Shippers specify when and where they want items delivered, and crowd members receive a fee for delivering the items.

**Grow**

Use purchase data to expand cross-sell and up-sell prospects, or to identify opportunities to offer new products and services. Up to now, retailers have had access to in-store, online and loyalty card data about customer purchases; however, few have had insights into how customers actually use products in their homes. By making the connection, retailers can gain this contextual understanding of customer behavior and leverage it to offer complementary products or to predict personalized subscription services. They could even use digital technology to strengthen customer loyalty by creating a personalized service channel between the two locations.

GoInStore is exploring this route by enabling customers to use smart glasses from their homes to communicate directly with a knowledgeable in-store assistant before or after making a major purchase.²⁴ In the future, retailers could capitalize on the trust established in these one-on-one connections with customers to suggest additional services, such as opera tickets to go with a newly purchased tuxedo or life insurance for a growing family. This mutual growth approach would require retailers to form new cross-industry business partnerships (in this case with a performing arts organization and an insurance provider), supported by digital business platforms.

**Feedback**

Capture real-time product evaluations in context and respond with more meaningful service solutions. Gathering just-in-time feedback while customers are using a particular product or service provides more authentic comments than a survey or social media “like” after the fact. A handful of retailers are recognizing this opportunity and installing Facebook beacons in stores or restaurants, which allow customers to check-in and see friends’ recommendations about the locations.²⁵ In the future, retailers could provide customers with a similar feedback mechanism in the home as they cook, clean, work or play. This approach could also provide opportunities for retailers to respond quickly and effectively to negative feedback with an appropriate offer that will help to retain customers.
Imagine texting your refrigerator from the supermarket to find out if you are out of eggs. Buying radio knobs at the auto store for the 1957 convertible that you are restoring, by initiating 3D printing at home. Or messaging your newest dress to a local make-up artist so she can pull together a new look for an upcoming party. All of these customer interactions and more are possible from retailers who link the in store and at-home experiences. The key is to look at the opportunities through the right digital lens.
Using the knowledge developed at each stage of the customer journey described above, Accenture Labs envisions three digital lenses that retailers can use to address these opportunities and make specific nodes more efficient. For the sake of continuity, we have used one example across all three lenses of a customer grocery shopping to show how the same concept can be viewed in different ways.

### Context-driven

**Question**

*How can customer experiences be better if different locations and situations can be leveraged?*

**Factors**

Locations—home, store (other locations: work, community centers, outdoors)

Situations—playing, working, relaxing

**Examples**

Dynamic mobile app changes depending on customer’s location (engage). In the store, navigation or product information is prominent; at home, the shopping list appears first.

Customer’s shopping list is generated on-the-fly when she goes into a store (discover).

When customer is on way to store, pre-populate shopping cart based on expiring items in fridge/cabinet (transact).

### Individual-driven

**Question**

*How can customer data be used to create personalized experiences?*  
(For more information, see our point of view, *Generating Deep Insights from the Customer Genome.*)

**Factors**

Traditional—demographics, purchase history, loyalty programs

Alternate—social media profiles, community-based data

Derived—static and dynamic insight obtained from further analysis of selected data sets

**Examples**

Based on data from indoor beacon tracking technology, shopping history and current home inventory, customer receives personalized content and offers on smartphone while at particular locations in the store (operate).

Using past transaction data and items most scanned on IoT device, retailer suggests ongoing delivery service for top 10 grocery items purchased each week (grow).

### Socially-driven

**Question**

*How can experiences be made better by including or excluding others?*

**Factors**

Alone—prefer to shop without help and input

Friends—have an experience with close friends or get advice from them.

Community—obtain feedback from a larger group of like-minded people

**Examples**

Auto-generated shopping list suggests a new healthy recipe, which the customer is excited to try at home. After making the recipe, she shares a review with her social network (feedback).

Retailer sets up registry (list of needed items based on current inventory) for house warming party. List and invitation is shared with social network. Friends choose what they want to bring (service).
Potential benefits from any combination of these approaches include:

- Expand sales by creating cross-sell opportunities based on information retailer knows about customer’s location, devices, etc.

- Resolve customer pain points such as adding required items at the time of need or getting personalized sales representative attention from the comfort of home.

- Increase customer adoption and engagement by making the shopping experience easier with contextual information.

- Send more personalized, targeted messaging based on more data from customers’ home environment.

- Build loyalty by connecting friends, family and community around the retail brand.
Connecting the in-store and at-home spheres

To move forward with achieving a state-of-the-art shopping experience, retailers should define which entry point(s) they wish to focus on to meet their customer experience objectives. The first step is to compare the digital lenses and select the experiences that work best to bring the in-store and at-home locations closer together. Some companies structure their organizations with stores and online/mobile shopping as separate units; however, ideally these should work as one entity to serve customers and enhance their experience. The next step is to determine which new or emerging digital technologies (including those from the start-up ecosystem) will enhance each particular customer experience. Finally, retailers should work to combine these technologies effectively, and then rapidly test and pilot the solution.

Those companies that take these steps and use digital technologies innovatively at each stage (or all stages) of the customer journey will be able to connect—and ultimately merge—the in-store and at-home spheres into one highly sophisticated and seamless customer experience.
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