5 DIGITAL COMMERCE CHALLENGES

RETAILERS MUST ADDRESS IN 2019

SMART TECHNOLOGY DECISIONS ARE CRUCIAL TO RETAILER SURVIVAL

AS WEAKER RETAILERS FALL BY THE WAYSIDE,
stronger competitors are investing heavily to ensure their survival. Amazon.com Inc. spent $13.6 billion on technology in 2018 and Walmart Inc. $12 billion, according to International Data Corp. Many other retailers, taking advantage of higher profits in recent years, also are pouring money into innovation labs, IT and other investments designed to enable them to go toe to toe with their most powerful rivals.

Given that most retailers don't have the budgets of giants like Amazon and Walmart, it's crucial to do the hard work of setting priorities. The purpose of this report is to highlight five key technology strategies that every retailer should consider implementing in 2019.

The most forward-thinking retail companies already have made a start, and in some cases significant advances, along these paths. They are using technology to reimagine the shopping experience in bricks-and-mortar stores, increase supply chain efficiency, tailor offers in highly personalized ways and turn the consumers' smartphone into an extension of their brands.

And they're moving fast. That's vital today when rapid advances in the tech consumers use every day has transformed how they shop. Increasingly, innovation is based on the use of artificial intelligence and machine learning that enables retailers to rapidly process vast quantities of data so they can instantly answer questions in ways the human brain simply cannot—whether that's the color suburban women in Dallas are likely to favor in April or the email subject line most likely to prompt an individual shopper to read a promotional message.

Retailers have no choice but to be technology leaders today. Here are five strategies that can position your company to succeed in 2019 and beyond. ■

STRATEGY 1
Create a culture of innovation

STRATEGY 2
Stores with smarts

STRATEGY 3
Make shopping easy (while boosting margin)

STRATEGY 4
Satisfy consumers' exploding fulfillment expectations

STRATEGY 5
How to be personal, but not creepy

From the editors of **Internet Retailer**

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CREATE A CULTURE OF INNOVATION

FAIL FAST, LEARN AND TRY AGAIN. That's been the key to success in Silicon Valley, and it's an approach leading retailers are adopting as well. But retailers must keep in mind there are two sides to creating a companywide culture of innovation that will produce positive results.

First, there is the process side: Teams must be trained to assess the best ideas, figure out how to test them, and then be willing to recognize when an idea has not panned out and move on. Of course, they also have to be able to spot a winner when one emerges.

There is also a technology side: You need a technology platform that can analyze lots of data, spot patterns and communicate information in ways that human beings can easily comprehend. And these systems must be easy enough to use that personnel can initiate and analyze a test without calling on IT. After all, if it's going to take you eight months before your tech staffers can set up a test, there's an excellent chance your competitors will pounce on the concept before you even get started.
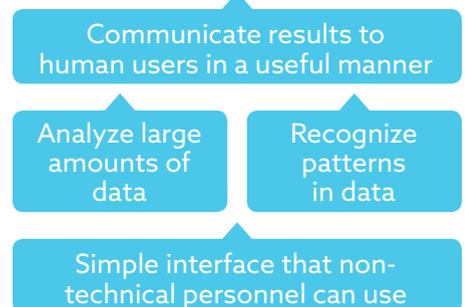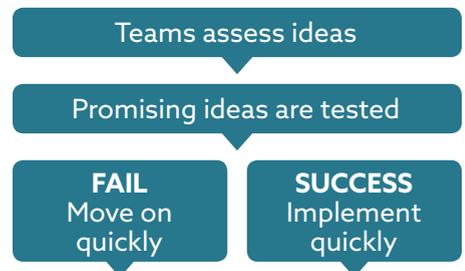
PICKING UP THE PACE

There are plenty of examples of major retailers moving more quickly to innovate than they have in the past. Take Target Corp., which introduced 20 new house brands in 2018. CEO Brian Cornell says Target's strategy last year was to develop niche brands that would appeal to particular segments of shoppers—including many who were not regular visitors to Target stores—rather than trying to make each brand appeal to a mass audience. Early returns, he says, show Target is indeed attracting new customers.

Especially noteworthy is the speed at which Target moved. Cornell says these brands were developed and launched in 18 months, rather than the three to five years the retailer would have taken in the past.
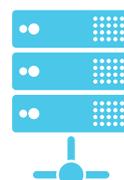
Target competitor Walmart also is moving quickly on many fronts. The retailer, the world's largest seller of groceries, has introduced

PROCESS

Teams assess ideas

Promising ideas are tested

FAIL
Move on quickly

SUCCESS
Implement quickly

CULTURE OF INNOVATION

Communicate results to human users in a useful manner

Analyze large amounts of data

Recognize patterns in data

Simple interface that non-technical personnel can use

TECHNOLOGY

THE WHY OF TRY

Retailers are constantly innovating, even if some experiments end in failure

WALMART
Blockchain technology in food supply chain

AMAZON
Fire smartphone

WALMART
VR headsets as an employee training tool

WALMART
Scan-and-go checkout system

AMAZON
Echo and Echo Dot smart speakers

blockchain technology into its supply chain for food so that it can more quickly and accurately identify where every item came from, when it was produced and how it traveled to store shelves. (Blockchain allows authorized users to add and view data in a distributed database that prevents data from being altered.)

Walmart also has deployed virtual reality headsets as a training tool, says Jeremy King, executive vice president and chief technology of Walmart store and e-commerce. With 2.2 million employees worldwide, Walmart is constantly training new associates, and King says VR is proving an efficient way to introduce them to the company's practices and visualize their future work assignments.

Not everything Walmart has tried has worked. The retailer tested scan-and-go systems in Walmart and Sam's Club stores that let shoppers scan items with their smartphones and check out without waiting in line. While the company is still using the technology at Sam's Club, it's discontinued its use at Walmart, saying it will wait until the technology improves before it tries it again.

Failure happens. Even Amazon flopped when it tried to introduce its Fire smartphone a few years back. But that didn't stop the e-commerce giant from pushing ahead with devices like Echo and Echo Dot that lets consumers ask voice assistant Alexa everything from the weather to where to find a trendy new style. About a third of U.S. adults now own a smart speaker, according to an Adobe survey, and Amazon commands two-thirds of the market, says eMarketer.

THE POWER OF THE MACHINE

While the willingness to try and fail is crucial, so, too, is the technology to test quickly and accurately. Too many marketers must wait until sales results come in Monday morning to see whether last week's promotions worked. And that's not fast enough these days.

Overstock optimized emails based on the time of day and registered an increase of **9%** in email open rates overall, and a **31%** increase in open rates among previously unengaged customers.

Technology can provide much faster answers. In a recent example, an apparel retailer saw sales of a particular item plummet and was quickly able to determine why, using AI technology, and address the problem in real-time. It turned out that its stores were running out of some of the most popular colors and sizes of that item, leading to the decline.

Online home goods retailer Overstock.com Inc. is also using AI and machine learning as part of its goal of one day providing a completely personalized website for every visitor.

Overstock started by creating two new data repositories. One takes in data about each customer from every touch point, including web and mobile sites, email, social media and online ads. The other database stores 25 million pieces of content—including product images, marketing materials, offer overlays and videos.

By applying machine learning, Overstock can quickly match the content most likely to appeal to a website visitor based on that consumer's history and current activity. One early test produced higher engagement with the e-retailer's ads on Facebook and Instagram. In another test, Overstock optimized emails based on the time of day and registered an increase of 9% in email open rates overall, and a 31% increase in open rates among consumers who had not opened the e-retailer's emails in the previous 30 days.

A key learning from these early experiments, says Overstock chief marketing officer J.P. Knab, was that the company needed better testing technology to ensure that the machine learning systems were producing better, and not worse, results than previous technology. Overstock has acquired better testing software, and is pushing ahead with its goal of creating a website without static pages, but instead where every page is created dynamically to cater to each shopper. That's the kind of bold vision that will be the future of retail. ■

STORES WITH SMARTS

THE NEW DIGITAL BATTLEGROUND in retail is, ironically, the store.

Macy's Inc. has added digital mirrors in cosmetic departments that let shoppers see how they would look with 250 styles of lipstick or eye shadow, all without the aid of a store associate. In furniture departments, a consumer can put on a virtual reality headset to visualize home furnishings in room settings, a feature that Macy's says has increased average order value by 60% and reduced returns to 2% of purchases.

An American Girl flagship store in New York City enables girls to create the doll of their dreams using digital touchscreens to select from more than a million combinations of doll types and clothing. Consumers seeking to tidy up a cluttered garage or child's bedroom can upload a photo or video of their task to a concept Container Store location in Dallas, then schedule a free in-store consultation with an organization expert. In the store, the associate uses digital tools in collaboration with the shopper to design an appropriate storage solution.

Retailers also are using data collected offline and online to tailor merchandise selection in stores to local preferences. For example, Target has opened a small-format store in lower Manhattan that caters to the many families in the area with small children. Amazon stocks books in each store in part based on how reviewers in that neighborhood have rated titles. Shoppers are encouraged to scan books with an Amazon app (or scanners available in the stores) to see online reviews and recommendations of similar titles.
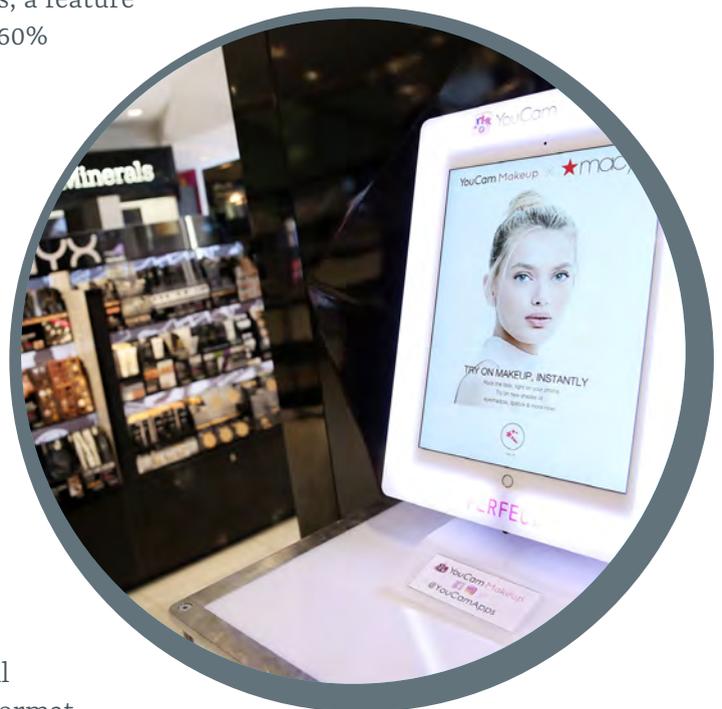
Digital mirrors at Macy's (above) allow shoppers to virtually try on 250 styles of lipstick and eye shadow. Elsewhere in the store, furniture shoppers can don a virtual reality headset to visualize home furnishings.

Nordstrom Inc. has begun testing Nordstrom Local stores in Los Angeles that have no inventory—consumers can go to these locations to pick up items ordered online and, while they're there, get garments altered and treat themselves to a manicure or pedicure.

Canadian grocery chain giant Sobeys, seeking to tailor its selection to community tastes, divided Canada into four regions and hired a merchandising manager to buy products likely to appeal to shoppers within their areas. For example, a store in New Brunswick that caters to many summer vacationers from Quebec is stocked with products popular with French-speaking Quebecois.

ASTUTE RECOMMENDATIONS

Retailers for several years have been equipping store associates with mobile devices that allow them to check a customer's previous orders and check shoppers out in the aisles. But these devices are being made smarter by connecting to systems beyond a retailer's network.

For example, technology from drop-ship technology provider RevCascade lets an employee show a shopper not only items available in the retailer's inventory in other stores and distribution centers, but also merchandise in the warehouses of wholesale suppliers. That minimizes the likelihood that the consumer will not be able to buy the item she wants.

Adding artificial intelligence can help the associate make smarter product recommendations. By connecting to weather apps, for example, the associate's tablet can be directed to suggest certain products in rainy weather and other products when the sun is shining.

If a consumer approaches an associate looking for advice on staining a deck, the associate's device can combine information about local preferences, along with the customer's shopping history, to suggest the most popular choices in the neighborhood at the customer's preferred price point. And it can go further by suggesting additional items likely to appeal to someone improving their outdoor space, such as patio furniture or flower boxes.

Consumers still make 90% of their purchases in stores—and advanced technology can help retailers maximize sales to the shoppers who walk into their physical locations. ■

90%
of purchases are still made in stores.

Retailers who use advanced technology can maximize sales to the shoppers who walk into their physical locations.

MAKE SHOPPING EASY (WHILE BOOSTING MARGIN)

AMAZON HAS TRAINED CONSUMERS that it can just take one click to make a purchase. That puts pressure on every other online retailer to make it super-easy for consumers to buy. Reducing friction increases sales, and doing it intelligently can also boost profits.

Making it easy to pay is one sure way to increase conversion rates, and it's especially important when serving the growing number of consumers shopping on smartphones. Many of these shoppers have created accounts with quick-payment services like PayPal and Apple Pay to facilitate phone payments, and online retailers report high adoption when they offer these payment methods to mobile shoppers.

E-retailer Boxed Wholesale estimates consumers save between 15 seconds and 1 minute when they pay with such options as Google Pay, PayPal, Apple Pay, American Express Checkout and Venmo, rather than having to enter payment and shipping information. Consumers use these options, which only require a user name and password, to make more than 20% of transactions on Boxed.com, and nearly 40% when using an iPhone.

Online apparel marketplace Poshmark accepts Venmo, which is primarily a peer-to-peer payment system, in part because Venmo users can choose to show their friends when they made a payment with Venmo. That social feature can introduce new consumers to Poshmark. The e-retailer also displays quick-checkout buttons selectively to avoid confusion, only showing Venmo to someone who has the app on her phone and suppressing Apple Pay for customers with Android phones.

Brian Gavin Diamonds, an online jeweler whose products typically sell for thousands of dollars and that previously only accepted payment by wire transfer, responded to customer requests for a more convenient way to pay by adding Zelle, a bank-to-bank payment system. Because Zelle doesn't charge

15 seconds to 1 minute

Time saved for Boxed Wholesale shoppers who pay with a quick-payment service like Google Pay or PayPal

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credit card transaction fees, the online retailer offers customers a 3% discount for paying this way, and quickly moved 1-3% of payments to Zelle.

SIMPLIFYING SEARCH

The search box on a retail website represents another crucial opportunity for retailers to remove friction and boost sales, given that consumers who use search on an e-commerce site are 2.4 times more likely to buy than others, according to Salesforce Inc., a provider of ecommerce and customer history software.

Relatively few major online retailers are taking full advantage of this opportunity, according to recent Internet Retailer research on on-site personalization. While 90% of sites studied offered type-ahead search—which presents likely terms when a consumer types the first few letters of a search term—only 8% of them personalized search results based on customer behavior.

One that did was the e-commerce site of Best Buy Inc. When a researcher initially typed in the letters "dr" the search function's top suggested term was "dryers." But after she looked at drones on the website, then returned to the search box and typed in "dr" drones moved to the top of suggested terms. That showed the site's search engine was registering her activity and reacting to it.

Even more sophisticated systems analyze the terms the consumer is using to gauge intent, and show appropriate results. On too many e-commerce sites, searching for "how do I make a return?" leads to zero results, when the sites should show a return policy.

Even if a consumer searches for a product, his activity or the words he uses could suggest he is in the early stages of researching a complex purchase: showing an article about how to select that product will show the consumer you understand what he's doing, and lead to more sales.

IS THIS DISCOUNT NECESSARY?

Email marketing is ripe for personalization because retailers often know a lot about shoppers who subscribe to their emails. And

90% of leading retail sites offer type-ahead search but only 8% of them personalized search results based on customer behavior.

that means they can better target offers, and understand which consumers will buy at full price, without a discount.

Luggage brand Tumi, for instance, analyzed customer data and sent a targeted email for a high-end line of suitcases to consumers who had spent at least $1,000 with the brand, viewed premium products or had opened an email from Tumi within 30 days. That segmenting produced a high 37% open rate for that email. Overall, marketing tailored to consumers who are not price-sensitive allowed Tumi to cut back on discounting and increase its full-price sales by 28.5% in a year.

AI can help other retailers protect their profit margins by analyzing a customer's behavior and progress in the purchase funnel to determine whether to offer a discount. ■

37%
Open rate for a targeted email to Tumi customers who had spent at least $1,000 with the brand, viewed premium products or had opened an email from Tumi within 30 days

29%
Increase in full-price sales at Tumi that was partly attributed to marketing to consumers who are not price-sensitive

SATISFY CONSUMERS' EXPLODING FULFILLMENT EXPECTATIONS

FULFILLMENT IS A HUGE CHALLENGE for retailers today, and, as with any challenge, it offers an opportunity for retailers that get it right. The key problem today is that too many retailers are simply throwing money at the problem: Winners will find a way to satisfy customers' high expectations while keeping costs in check.

The basic problem facing retailers is that consumers today expect free and fast shipping. A survey released in January 2019 by U.S. retail trade organization National Retail Federation showed 75% of consumers expect shipping to be free, even on online orders under $50, up from 68% a year earlier. And 39% expect two-day shipping to be offered at no charge.

Retailers are responding, in many cases by using their bricks-and-mortar stores to offer convenient pickup or lower-cost fulfillment options. Omnichannel fulfillment was rated as a high priority by 94% of retail executives in the U.S., Canada, United Kingdom, France and Germany surveyed in September 2018 by Forrester Consulting for IBM.

But half or fewer are measuring their success on key metrics. Only 50% measure customer satisfaction with omnichannel initiatives and 47% measure their profitability, according to the Forrester survey.

EXECUTIVE SURVEY

Measurement lags when it comes to omnichannel fulfillment

"What metrics does your company use to measure the return on your omnichannel fulfillment investment?"

50%	47%	44%	43%	41%
Customer satisfaction	Profitability	Cost of doing business	New business/ sales	Brand position

Source: Forrester Consulting survey of 300 executives

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Forrester also found significant differences between the results of leaders and laggards. Leaders—those that had optimized several omnichannel fulfillment capabilities—were 1.6 times more likely than the rest to see an increase in customer satisfaction, 1.8x more likely to improve profitability and twice as likely to increase sales.

Those results show it's imperative for every retailer to keep up with the leaders when it comes to fulfillment.

HOW LEADERS ARE WINNING

There are many examples of retailers making headway. Overstock.com, for instance, analyzed years of purchasing data to determine which color couches are preferred on the East Coast versus the West Coast, and stocks inventory in its distribution centers accordingly to minimize shipping costs. It also builds its warehouses with flexible shelving so it can adjust the size of storage bays by season to accommodate seasonal merchandise without adding additional space.

As more retailers fulfill online orders from stores, many start by picking the store nearest to the online shopper to handle the job. But that may mean taking a purple skirt from a store where those skirts fly off the shelves. AI-powered system can take into account seasonal patterns and variations in sell-through velocity for all of a retailer's stores to find the best store to fulfill each order.

Outdoor gear retailer REI uses IBM's Order Optimizer technology to improve fulfillment. "Order Optimizer has allowed REI to see immediate reductions in split shipments, reducing costs and improving customer delivery experiences," said Matt Bergerson, director of omnichannel experience and operations. "It also helped us manage capacity constraints at peak, reducing order expedites and providing faster service to our customers."

Leaders in fulfillment are ratcheting up the pressure on competitors every day. Amazon, for example, is testing fulfillment by robots and drones, delivery to the trunk of customers' cars and keyless systems that allow drivers to put a package inside a shopper's home when no one is there.

If there is one question retailers must squarely address in 2019 it is how to solve the fulfillment challenge in a way that maximizes customer satisfaction while minimizing costs. ■

> Overstock.com minimizes shipping costs by analyzing which color couches consumers on the East and West Coasts prefer, and allocating inventory accordingly.

HOW TO BE PERSONAL, BUT NOT CREEPY

CONSUMERS ARE BECOMING INCREASINGLY FRUSTRATED with targeted online ads, and governments are responding with stricter privacy laws. For retailers, this is not just a growing compliance issue—but one of winning and retaining consumer trust.

Consumer views came through clearly in a 2018 survey by marketing technology firm HubSpot: 79% of online consumers in the U.S. and Europe said they're tracked by retargeted ads, and 91% agreed that ads are more intrusive today than they were a few years ago.

The most sweeping legislative response has been the European Union's General Data Protection Regulation, which took effect in May 2018. GDPR bars companies from using consumers' personal information without their consent, requires marketers to obtain new consent from consumers with messaging that meets GDPR rules and requires marketers to erase consumers' data at their request. The law not only applies to any retailer doing business in the EU but also to any company anywhere in the world accepting orders from EU citizens on a retail website.

In addition to GDPR, Canada's more restrictive email marketing law took effect in 2017, and California has passed what will be the most sweeping privacy law in the U.S. when it takes effect in 2020. Among other provisions, that law would require companies to reveal what data they hold about an individual and to delete it at her request. It applies to any company with annual revenue of $25 million that does business in California, which means virtually every midsized or larger U.S. retailer and many larger non-U.S. brands.

CREATIVE COMPLIANCE

GDPR requires retailers to get new opt-ins from all email recipients, and that has produced some sterling examples of creative compliance. The UK online apparel retailer ASOS, for example, sent out emails to its list emphasizing the benefits of

91%
of consumers agree that online ads are more intrusive today than they were a few years ago.

continuing to receive its emails, while also empowering recipients by giving them options as to the frequency and type of emails they receive.

Selfridges, the UK department store, didn't just rely on dedicated emails asking for renewed permission to send email post-GDPR: It included the request for a new opt-in on all promotional emails, highlighted by a bright yellow box featuring eye-catching animated type.

Transactional emails, which are opened at twice the rate of marketing email, can also provide a productive way to acquire new opt-ins. For consumers that respond to text messages, retailers can use that channel to renew their email list.

At the same time, retailers going through a program to obtain renewed opt-ins from shoppers must adjust their projections. Inevitably, not every recipient will agree to continue receiving email, so lists will decline in size initially. On the other hand, a retailer's best customers are the most likely to opt to stay on the list, and that will improve open and click-through rates. Marketers will want to take those likely shifts into account as they forecast results.

TECHNOLOGY AND TRUST

Meanwhile, retailers must evaluate whether their technology is equipped to meet the demands of new privacy regulations. GDPR gives a company 30 days to respond to a consumer's request to have her data removed. Not every retailer's e-commerce platform or customer history database is set up to comply with an influx of such requests.

But at the heart of the matter is winning the customer's trust. More retailers will want to consider the approach of The Grommet, an online retailer that's not a household name and that sells innovative devices—such as a carbon-pad eyeglass cleaner or a "mindfulness tone therapy system"—mostly supplied by small businesses.

Many shoppers arrive at TheGrommet.com after seeing such products in search results, and without necessarily knowing anything about The Grommet, says the e-retailer's CEO, Julies Pieri. That's why the website doesn't ask shoppers who land on a product page to sign up for its emails, she says. "We haven't earned


Selfridges included the request for a new opt-in on all promotional emails, highlighted by a bright yellow box featuring eye-catching animated type.

their trust yet," Pieri says. "If the first thing we ask is for them to create an account they're likely to think, 'I don't know yet if I like you.' It makes sense."

Instead, The Grommet offers customers the option of signing up for marketing email on the order confirmation page and in follow-up emails. And it uses those communication channels, as well as inserts in shipping boxes, to emphasize its mission of helping small businesses reach customers with innovative products.

Retailers that earn customers' trust will have the easiest time complying with privacy regulations, because their customers will want to continue receiving their communications. In addition to acting in a trustworthy way, retailers must deploy technology that will allow them to win the maximum numbers of customers to continue receiving email, while also complying promptly when some consumers choose to opt out. ■
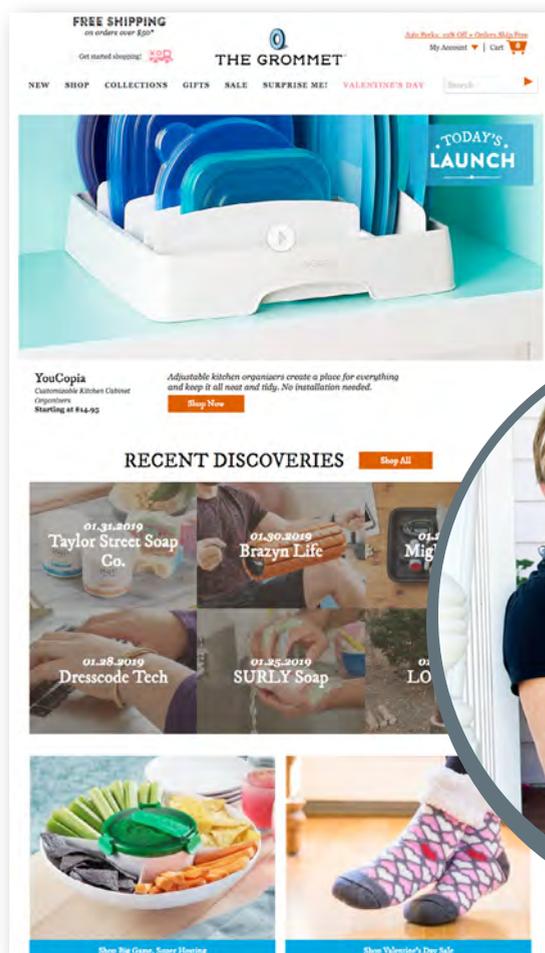
> "If the first thing we ask is for them to create an account they're likely to think, 'I don't know yet if I like you.' It makes sense."

—**JULIES PIERI,** CEO, THE GROMMET

A FINAL THOUGHT

CONSUMERS LEAVE DIGITAL FOOTPRINTS during many of their shopping trips. That includes when they purchase online and offline, when they browse websites and mobile apps, respond to email (or don't), post to social media, even when they speak to voice-activated speakers in their homes. That gives retailers lots of data about their customers.

Retailers also have plenty of data about their own operations: inventory, profit margins by SKU, delivery costs, customer service costs, and more.

Retail success today depends on using both sets of data to maximum effect. Retailers must segment customers intelligently so that they can craft offers that will appeal to each type of customer. And they must take into account the cost of each offer, so that they can optimize profits.

That's easier said than done. But with the big advances in artificial intelligence and machine learning, retailers now have technology options that allow them to instantly analyze vast quantities of data to come up with winning solutions.

Victory in the retail race will go to competitors who create a culture of innovation, embrace fast failure and continuous experimentation, and settle for nothing less than superior performance. Those are the companies rivals will emulate, and struggle to catch. ■