

2023

RETAIL ISSUE 2

# Guide to Next.



publicis  
sapient



**2023**

How retailers can create the most impact  
in the coming year—on their business  
and their shoppers.

# TABLE OF CONTENTS

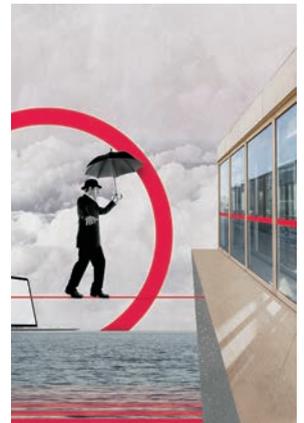


**04** The Race for Retail Media Networks

**14** Sustainable Supply Chain

**24** The Return to In-Store Shopping

**33** Retail in Web 3.0





HELLO



# ● The Race for Retail Media Networks

## **AUTOMATION, PERSONALIZATION AND CLOSED-LOOP ACTIVATION: HOW TO STAND OUT IN THE RACE FOR RETAIL MEDIA NETWORKS**

Retailers have traditionally relied on product sales for most of their profits. Now, the drastic rise in e-commerce and industry profitability challenges has prompted them to turn digital real estate and customer data into ad sales, providing abnormally high returns for the industry.

While traditional *retail media* has been around since the first brick-and-mortar retail stores, the significance of the term has changed in the last five years to focus on digital *retail media networks* (RMNs), or retail data monetization.

RMNs have already proliferated across the retail industry, but what will determine their future success, and which networks will come out on top?



---

## What is a retail media network?

Retail media refers to any advertising or media that's located near the point of sale (i.e., within a physical store or on an e-commerce platform). This could be a cardboard cutout in a grocery store or a "suggested product" ad on Amazon.

Retail media networks are the digital platforms created by retailers that allow

brands to purchase ads directly through them, either on a retailer's owned e-commerce website, in a physical retail store, or on a third-party like Facebook, Google or even connected TV, which is referred to as off-site advertising.

While retail media networks could include physical ad placements, their growth areas right now are primarily digital, or at the intersection of digital and physical.

---

## How do retail media networks work?

RMNs allow retailers to monetize their customer data through large scale advertising. From Walgreens to Sam's Club to Ulta, many of the largest retailers have recently announced and advanced their own retail media platform offerings.

RMNs range from in-house platforms with unique self-service capabilities to private marketplaces where data from multiple retailers is uniquely available to specific advertisers. Many of these advertisers are already longstanding retailer partners or suppliers, but others are digital natives that can provide a net-new revenue stream.

### **SELF-SERVICE RETAIL MEDIA NETWORKS**

Self-service retail media networks allow brands to choose their own advertising campaign parameters—including location and audience attributes—based on an internal pricing algorithm.

For example, Albertsons Media Collective created its own self-service offering, and Walmart Connect's partnership with The Trade Desk allows it to do the same.

“The self-service capability is a huge shift and change,” said Ray Velez, global chief technology officer at Publicis Sapient. “You don't have to meet with the team. You don't have to make advertising consistent with a predefined set of activities for the year, but rather run campaigns much more fluidly.”

According to Velez, over time, RMNs will continue to migrate toward more in-house and self-service models that aid both local and national advertisers. It's more efficient for ad buyers as they get full control of their spend—including closed-loop reporting—while also allowing retailers to scale.



---

## Why are retail media networks growing?

In the past, retailers were very hesitant to monetize their transaction and loyalty data, creating a gap in an advertiser's ability to deterministically measure the efficacy of a campaign.

The market shift away from cookie-based audiences corresponds with retailers' increasing comfort with using their first-party data for advertising. This creates a unique opportunity for retailers to become publishers, directly capturing more ad dollars through strategic data monetization via retail media networks. The result is a major uptick in the overall number of networks themselves, with several new networks created every year.

And despite a slower growth in retail media ad spend in 2022, eMarketer is still predicting \$80 billion dollars in spend for 2024.

On many platforms, including Apple's, marketers' ability to track consumers via third-party cookies has already been diminished. In 2023, Google will follow

in the footsteps of most other platforms. These changes create a higher emphasis on first-party customer data—both for the retailer and the advertiser—increasing the value of a retailer's data monetization opportunities for their owned and operated properties.

Deterministic closed-loop measurement is the biggest perk driving the value of retail media networks compared to other digital advertising. RMNs can connect digital advertising campaigns to actual purchases at an individual level, which Google and Facebook can't inherently offer without the retailer sending their transaction files to those third parties.

Another retail media network benefit is the retailer's ability to bridge customer in-store shopping habits with their online purchasing patterns, offering another unique differentiation from other channels.



There are three things that are really driving this resurgence in retail media. The impact of third-party cookies and signal loss, the potential for closed-loop measurement and the linkage of online and offline purchases with a digital persona.



**RAY VELEZ, GLOBAL CHIEF  
TECHNOLOGY OFFICER**

For example, as digital signage continues to grow within physical channels, retailers are striving to monetize those screens by using their first-party data assets. Many retailers are adding in-store digital signage as a media network channel option to their offering, expanding their ability to speak to customers at critical decision moments.

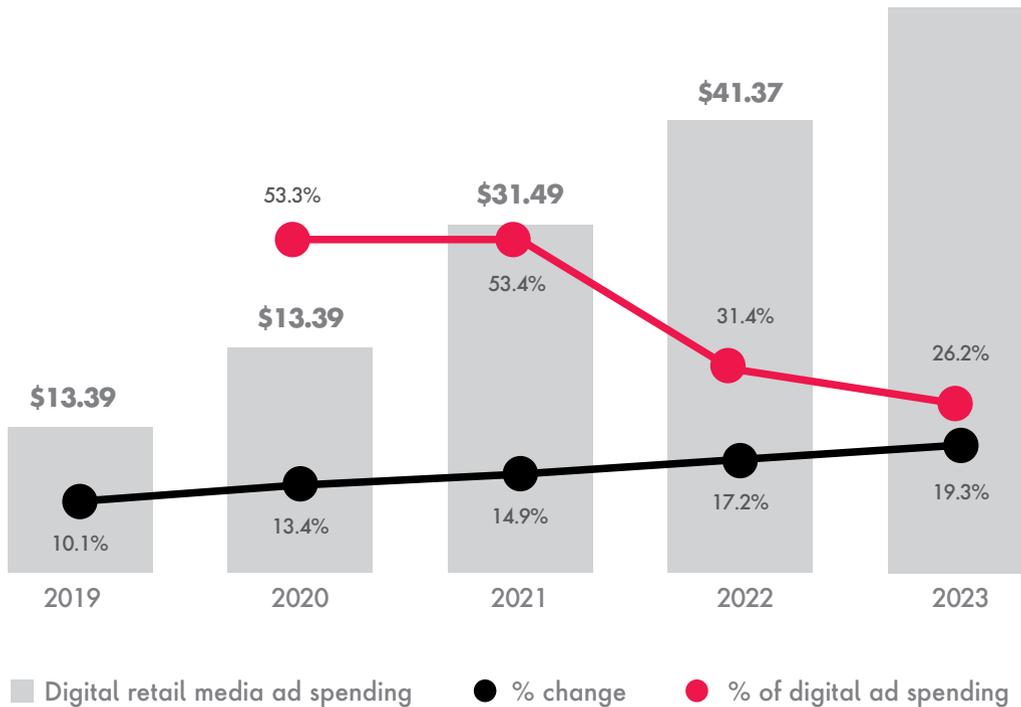
“How do I automate the sales of digital signage in my stores as part of a retail media network? How do I ensure consistent customer experiences in-

store and online with signage in a way that’s intuitive for customers? These are questions clients will continue to ask,” Velez said.

The future of retail media is no longer about defining the value or creation of retail media networks—it’s about taking them to the next level through digital transformation.

How will retailers make their networks stand out in 2023 and beyond?

### US DIGITAL RETAIL MEDIA AD SPENDING, 2019–2023



NOTE: digital advertising that appears on websites or apps that are primarily engaged in retail ecommerce or is bought through a retailer’s media network or demand-side platform (DSP); examples of websites or apps primarily engaged in retail media networks include Amazon’s DSP and Etsy’s Offsite Ads; includes ads purchased through retail media networks that may not appear on ecommerce sites or apps.

Source: eMarketer, Oct 2021

---

# The top six retail media trends for 2023



## Using loyalty programs to create better value for retail media networks

Facing a drop in brand loyalty after the emergence of COVID-19, consumer packaged goods (CPG) brands are looking for solutions to stand out to customers in any way they can.

While initially RMNs could stand out with the quantity of customers and traffic to their e-commerce sites, retail media quality is becoming the best way to lure in marketers.

Retailers like Ulta and Sam's Club, with strong legacy loyalty programs that store years of high-value customer purchase data, can offer advertisers information to personalize ad placement and content.

"The digital ads that brands were buying are not as effective anymore," Velez said. "Third-party cookies have depreciated, and it's going to get worse. If you build a media network, the revenue gain is amplified by reversing signal loss and creating more signal through additional impression opportunities with customers. The increased impressions improve customer understanding and make loyalty more effective."



## Expanding into larger retail media marketplaces

There are many different channels that retailers haven't yet integrated into their networks, like digital signage, connected TV, Google, TikTok and many others.

“Many retailers are prioritizing on-site because of the ability to maintain control over their first-party audience data, creative and destination.

However, when retailers run an off-site advertising campaign that drives more traffic back to their owned and operated properties, it increases their monetizable inventory and adds more signal into their customer identity graph,” Velez said.

Walmart recently partnered with Roku to offer TV commerce, or shoppable ads, on their programs. Although this isn't yet a major channel for retail media networks, it's a future avenue that other retailers will soon follow—bringing more data to personalize the customer experience.

“Consumers are getting more and more demanding. They don't have time to come in and browse around your site. They want things very specific to them,” said Sudip Mazumder, senior vice president and retail industry lead at Publicis Sapient.



## Offering programmatic sell-side retail media inventory

Often, RMNs have not yet connected on-site and off-site audiences to programmatic demand-side platforms (DSPs). However, as retailers are increasing their self-service platform capabilities, some are considering opening a portion of their retail media inventory to programmatic buys. This means the process of buying ad space will be fully automated for some advertisers on most successful RMNs moving forward.

According to Mazumder, the gold standard after self-service will be AI and machine learning algorithms that can determine the “next best step” for consumers through ad recommendations.

So far, Amazon's recommendation algorithm is the most advanced when it comes to personalization, and other successful retailers will continue to advance their platforms in this direction.



## Transitioning to retail media network platforms led in-house

For over a decade, retailers outside of Amazon have slowly transitioned to in-house models to create networks with staying power instead of relying on third-party companies to run their networks. This gives retailers more control and capability to scale their networks for the future.

According to Velez, if you outsource your network to a third party, they don't build out your internal capabilities, and it might put you in a hole when it comes to advanced functionality.

In the short term, outsourcing can help build, launch and operate retail media networks. As RMNs advance along the maturity model and become a core part of the business, retailers can think about decoupling from their outsourced relationship to own the entire end-to-end solution. Successful in-house integrated technology stacks and organizations can ensure that your personalized offers are synchronized with media network impressions across all customer touchpoints.



## Creating closed-loop measurements for retail media by adding in-store touchpoints

While in-store retail media has traditionally ranged from cardboard displays to video screens, RMNs are working to integrate interactive digital touchpoints to create a closed-loop omnichannel measurement system for networks.

These touchpoints range from interactive kiosks, Wi-Fi tracking, smart end caps or any type of physical ad unit that can connect to a customer profile. They allow retailers to track customer behavior and purchases through more interactive data exchanges and connect them to online purchases and profiles.

*“Solving for identity in-store is still a challenge that retailers are striving to overcome. Even being able to match credit cards or other attributes with identity at the physical point of sale makes a huge difference,”*  
Velez said.



## Improving customer data quality through customer data platforms (CDPs) and customer 360 profiles

Retail media networks are built on customer data, and retailers will continue to improve the quality of this data.

This effort will increase the value of advertising real estate for CPG companies and other marketers that are using RMN data to connect with their customers.

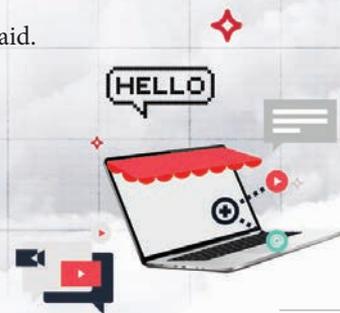
Retailers that don't already have consolidated CDPs with 360-degree customer profiles will look to create them. Those that do will further integrate their data into a golden customer record and connect it to their retail media offerings. CDPs that have 360-degree customer profiles will have the data co-ops and technologies to future-proof against signal and cookie loss.

This is also an important opportunity to look at the connection between customer data and modern privacy, progressive consent, and preference management technology. This is critical to continuing to hold customer trust and stay compliant with the changing privacy and regulatory landscape.

The shift from advertising to personalization in retail media RMNs will continue to evolve with trends through investing in their digital capabilities, especially as more networks enter a saturated market.

So, what's the key for retailers to stand out among other networks? Personalization. RMNs that can get the right product in front of the right consumer at the right time will prove much more valuable to brand advertisers.

"You might be selling your own branded products against advertiser products as well. So, what's important is thinking about your advertising as a personalized experience for the consumer, not just ad units," Velez said.





# Sustainable Supply Chain

## THE KEY TO RETAILERS' SUSTAINABILITY GOALS

In the past, supply chain sustainability was a “nice-to-have” for many retailers. Understanding the origins of every product and material was certainly optimal but not always realistic or necessary.

Today, mounting consumer interest and regulatory pressure around sustainability mean retailers are investing in technology to provide accurate supplier disclosures, reduce emissions and decrease waste.

But the road to meeting consumer and regulatory standards isn't perfectly clear. There are many ways to achieve the elusive idea of “sustainability,” and each retailer has unique challenges regarding environmental, social and governance (ESG) goals.

How are top retailers getting closer to their net-zero goals through supply chains in 2023? It starts with increasing supply chain visibility.

---

## What is supply chain visibility?

Supply chain visibility is an accurate view of the entire supply chain from end to end. This means seeing where individual products and materials are in the supply chain journey and where they come from, including all external partners.



It starts with raw sourcing, and it doesn't end when the customer purchases the product. For example, what do consumers do with the packaging? If consumers return products, where do they end up?

The entire lifespan of the product and packaging itself has become increasingly relevant to retailers and consumers alike.

Increased visibility, especially real-time visibility, is a top concern for the retail industry in 2023.

---

## Internal supply chain visibility vs. external supply chain visibility

In the past, supply chain visibility focused on internal oversight of the end-to-end supply chain, but it's now taken on a much broader meaning that includes external stakeholders, like consumers.

### **INTERNAL VISIBILITY THROUGH SUPPLY CHAIN CONTROL TOWERS**

Pre-COVID, many retailers had less visibility over the supply chain journey, and major disruptions weren't as frequent.

Now, retailers have the impetus to gain greater control and knowledge of the entire supply chain through technology and overall digitization.

IoT technologies like RFID tags, supply chain control towers, blockchains and data platforms have given retailers more visibility than ever before.

### **EXTERNAL SUPPLY CHAIN VISIBILITY THROUGH TRANSPARENCY TO CONSUMERS**

Consumers and regulatory bodies are also interested in the end-to-end supply chain, especially when it comes to sourcing. Customers want to know if the products they're buying are coming from sustainable suppliers that practice ethical labor standards.

Not only are retailers focusing on tracking products in the first place, but they also have to figure out the best way to communicate that information to consumers.

---

## Why is supply chain visibility important now?

From ESG targets to supply chain volatility, there are a variety of emerging external conditions creating pressure and incentive for retailers to gain end-to-end visibility in 2023.

In the past year, U.S. state and federal governments have considered regulations related to supplier and carbon emissions disclosures for CPG companies and retailers.

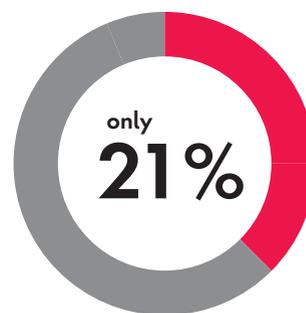
### **THE SEC'S CORPORATE CLIMATE RISK DISCLOSURE RULE**

In March 2022, the U.S. Securities and Exchange Commission (SEC) proposed a rule requiring all publicly traded companies to disclose materials emissions made by a company's suppliers, detailed plans for meeting emissions offset pledges, and reliance on offsets.

While this rule is not currently in effect, it could require emissions data from Tier 1 and Tier 2, 3, 4 or 5 suppliers. This means that not only would retailers need to have accurate supplier information, but emissions information as well.

### **THE FASHION SUSTAINABILITY AND SOCIAL ACCOUNTABILITY ACT**

In January 2022, the New York State Senate unveiled an act requiring fashion retailers or manufacturers doing business in the state to conduct “good faith” supply chain mapping and disclose at least 50% of their suppliers across all tiers of production.



**OF FASHION FIRMS CURRENTLY NAME THEIR SUPPLIERS PUBLICLY SINCE JUNE 2022.**

The act would also require these businesses to publicly set and track ESG targets, including employee wages, greenhouse gas emissions, and the use of recycled materials.

These proposals represent a growing push for retailers to verify ethical and sustainable labor practices across the board—and a need for them to pick up the pace.

## RETAILER NET-ZERO EMISSIONS GOALS

Many retailers are chasing ambitious “net-zero” carbon emissions goals through lowering carbon emissions and buying offset credits by 2030, 2040 or 2050.

According to the Science-Based Targets initiative (SBTi), 45 major global retailers have committed to a net-zero target, up from just 13 in 2021.

Other retailers are focused on different sustainability targets, such as reducing greenhouse gas (GHG) emissions by a certain percentage within a set timeframe. Fifty-two retailers have committed to non-net-zero targets as of 2022, up from 40 in 2021.

However, only a small portion of retailers are on track to meet those goals. The rest are looking for tangible ways to make progress in the coming year.

## CONSUMER DEMAND FOR SUSTAINABLE SOURCING

Consumers are growing wary of “greenwashing,” empty promises or green labels with no action behind them.

They want to know where products are coming from and how they can be reused or recycled to reduce waste.

Research shows that consumers do care about ethical sourcing and would even pay more for it.

In the next year, it’s time for companies to combine innovation, sustainability, and profit goals, starting with supply chain visibility and transparency with consumers.



Customers and companies want to know where products are coming from—and if they’re being produced using non-standard practices. There’s an element of ‘react or act’ before it’s too late. ”

**SATYENDRA PAL, GLOBAL OMNI FULFILLMENT  
PRACTICE LEAD AT PUBLICIS SAPIENT**



---

## Three ways retailers will improve supply chain visibility in 2023

Retailers will continue to make strides in supply chain visibility this year through technology and transparency alike.

While significant near-term production changes are overwhelming, efforts to analyze and disclose supply chain practices can make an arguably greater impact.



## Supplier transparency through blockchain and cryptocurrency

With growing regulatory and consumer concern toward reporting emissions, retailers are looking past their own ESGs and into their suppliers' sustainability. Both blockchain and cryptocurrency technology are growing tools that can power end-to-end visibility, by allowing external parties, like vendors and suppliers, to plug in data.

“Blockchain is essentially a decentralized trust agent,” said Erid Haderaj, Product Manager at Publicis Sapient and Web3 consultant. “You can, in real time, track your data and ensure there’s no kind of misconduct or malicious actors, because once it’s on the blockchain, it can’t be tampered with.”

For example, in a grocery supply chain, farmers, shipping agents, packers and retailers could input quality product data into a cloud-based system, offering more protection over food perishability and helping avoid food waste.

While many people think that cryptocurrency needs a monetary value, it can also be used to tokenize physical products on the blockchain. Every single product moving through the supply chain could be attached to certain digital tokens.

“Retailers can create a digital twin of their inventory—or some type of API—that can grab product information and transfer it into a Web 3.0 environment,” said AJ Dalal, Managing Director, Data & Web3 Strategy at Publicis Sapient. “Using a cryptocurrency to tokenize and move things across the supply chain allows you to have real-time inventory updates.”

In the future, the supply chain verification process could become even more automatic—through geospatial information using satellite imagery of a particular deforestation area, or the provenance of raw materials, which would all be represented in these digital tokens.



## Artificial intelligence and machine learning for demand forecasting

A key part of the end-to-end supply chain is what happens to the products when they're sitting on shelves.

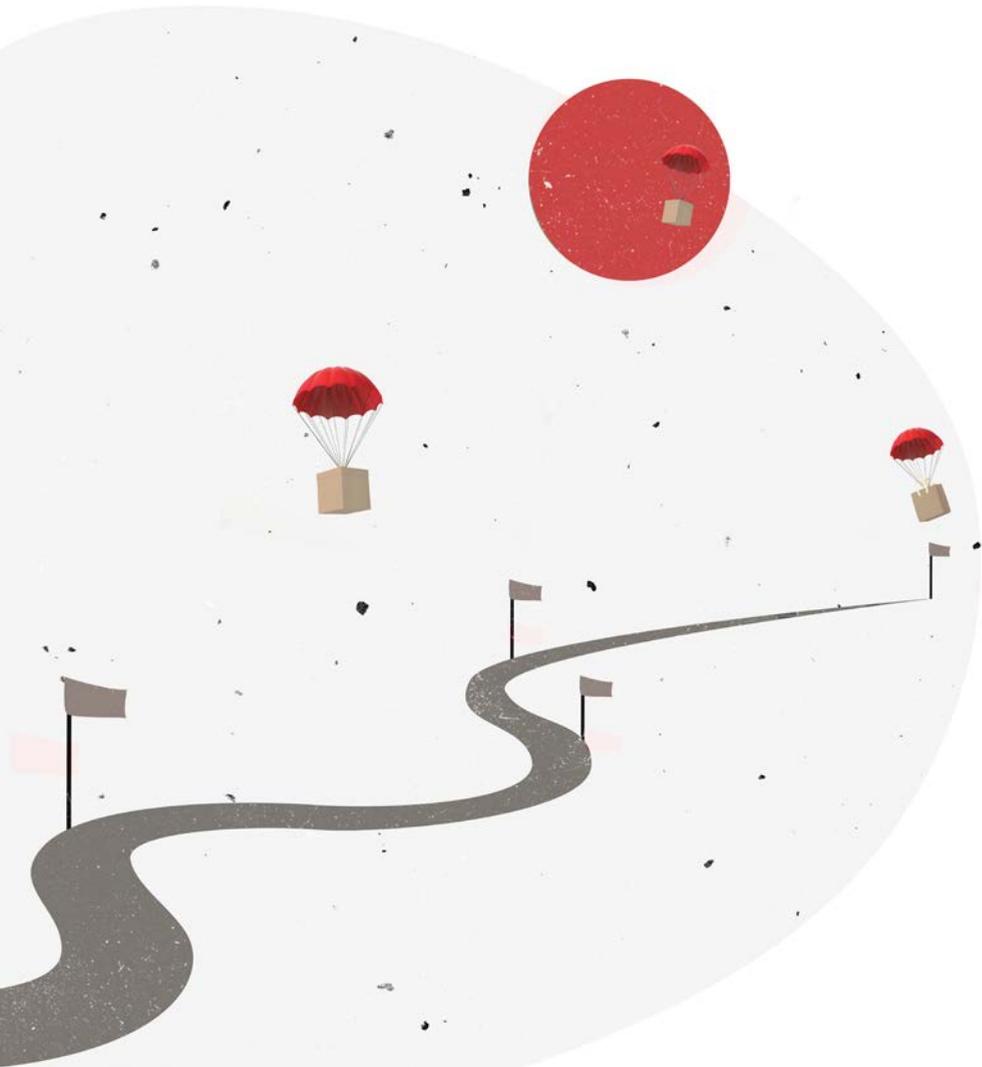
Retailers were weighed down by excess inventory in 2022 and are looking for permanent solutions to better forecast demand in 2023. Not only is food and other product waste unsustainable, but it's also not profitable.

Artificial intelligence (AI) will be a crucial element of accurate demand forecasting for retailers in the future, and more and more retailers will begin to invest once they've implemented better tracking across the supply chain.

Walmart, for example, has invested in technology to automatically scan and count stock as soon as it arrives at consolidation centers.

"In the past, retailers had supply chain visibility from external vendors, purchase orders and more," Pal said. "But if you only care about when things are landing, you only know if something is going to be delayed when it's actually delayed. And by then, it's too late."

The sooner retailers invest in this technology, the better the algorithms will become for the future—and the more sustainable supply chains will become.





## Consumer transparency and involvement with circular supply chains

In 2023, circular supply chains will become the norm—starting with consumer transparency. A circular supply chain ends with recycling or reusing a product instead of throwing it away. This can happen through the retailer, through the consumer or through a joint effort.

Companies can build better relationships with their consumers by telling “product stories” and involving their consumers in the entire journey of the product—from suppliers to sustainable disposal.

Many retailers have pledged to design their own branded products with sustainable packaging as part of a circular economy. While the shift in packaging design is crucial, it’s also important that retailers communicate recycling options to consumers in a meaningful way.

“Companies can use blockchain to reward customers for certain actions,” Haderaj said. “A retailer’s app can verify that a product has been recycled by using AI to analyze

a picture that a customer submits. For example, for every five bottles a customer recycles, they could receive a token for a 10% discount on the next product. By employing blockchain technology, the retailer can easily see how many tokens each person holds in real time.”

Retailers can use this technology to collect more meaningful data on where products go at the end of their supply chains—and work with customers to become more sustainable together and remain relevant through the entire customer journey. While visibility and transparency alone will not immediately reduce carbon emissions next year, they are essential in determining future production changes that will achieve ESG goals.





# ● The Return to In-Store Shopping

## **THE RETURN TO IN-STORE SHOPPING: HOW TECHNOLOGY IS FUELING CUSTOMER EXPERIENCE**

Today, a consumer has access to an infinite number of products right at their fingertips. With a computer or phone, they can shop for hours without leaving home, so why would they?

Interestingly enough, the end of COVID-19 lockdowns led to a departure from couch surfing and return to in-store shopping. According to Publicis Sapient research, almost nine in 10 (88%) of consumers prefer to shop in-store for some items.

The top three customer reasons for shopping in-store instead of online are to browse products, touch products and try on clothing. But one thing is clear: Now that online shopping has brought new expectations of convenience, the next era of in-store retail has a higher standard to meet.

A proliferation of new commerce channels has prompted many retailers to go back to the drawing board and re-evaluate what the original in-store channel should look like.

“You need to create something that engages customers in a new way in order to draw them into the store when they could just buy online,” said Sara Alloy, North America Retail Experience Industry Lead at Publicis Sapient. “Retailers are going to have to think bigger and consider what’s important to customers now to engage them and give them a reason to shop in-person.”

How will top retailers meet customers’ appetites for the in-store experience? Behind the flashy pop-ups and buzzworthy concepts is a strong foundation of interconnected technology.



Brands recognize they are competing on experience. When a customer has a really good in-store shopping experience with a brand, that sets the bar higher for everywhere else they shop. »

JACKIE WALKER, RETAIL  
EXPERIENCE STRATEGY LEAD  
PUBLICIS SAPIENT

---

## What will a best-in-class store experience look like in 2023?

At the end of the day, customers still enjoy going to the store—they just have higher expectations. Certain well-accepted frustrations of the past, like long checkout lines, confusing store layouts or carpets from the 1980s may be reason enough to find a new retailer or switch to Amazon. 62% of customers say they would stop shopping at a retailer if the experience is unpleasant.

Often, these best-in-class store experiences do one of two things: **create efficiency** or **create engagement**.

## **MAKING THE IN-STORE RETAIL EXPERIENCE MORE EFFICIENT**

Customers are now browsing, buying, picking up and returning merchandise through various interaction points, and their choices are often made based on what is most convenient in that particular circumstance. Target's drive-up pickup option is seamless for customers and has been scaled to all their store locations. Customers can rely on it, and it makes their shopping journey simpler.

A key bottleneck point when shopping brick-and-mortar is the point of sale, and with e-commerce, customers have gotten used to a faster and easier checkout. At most grocery stores today, customers or checkout clerks still have to scan each item individually—and for produce, even enter in each product code themselves. Many grocery retailers are testing a checkout-free system that would allow customers to just walk out or scan their entire cart at once, providing an experience almost as seamless as hitting the “Deliver” button after grocery shopping online.

## **MAKING THE IN-STORE RETAIL EXPERIENCE MORE ENGAGING**

There are also many opportunities for retail stores to up their game on engagement compared to e-commerce shopping. In the past, stores have relied on associate-led or conversation-based engagement strategies. Today, with staff shortages, many stores are turning toward more technology-based experiences to connect with customers in-store. According to Publicis Sapient research, 76% of customers engage with retailer apps in-store to locate products and look for reviews, deals or clothing fit information.

For example, Home Depot's mobile app allows users to see store maps to navigate to different items, scan product barcodes to read product reviews, take photos of items in their home that they need to replace and reverse image search to find the same products in-store. The app also integrates AR, so customers can visualize how certain furniture items would fit in their own space.

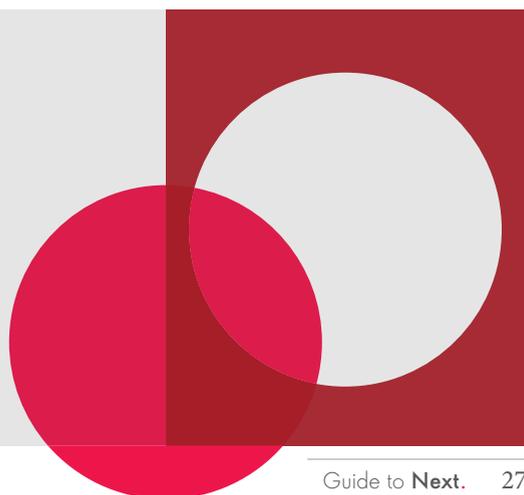
Wawa is another retailer that's mastered in-store engagement with its ordering kiosks. The kiosks allow customers to quickly and easily browse through menu options to build custom hoagies, get prompted to add certain items to their order and see seasonal promotions.

The PetSmart app goes even further through personalized content and an in-app game called “Treat Trail” that allows users to rack up coupons and rewards. After uploading personal pet information, the app curates customized checklists and articles based on the type of pet to deeply engage users.

Some brands have looked to larger-scale experiential installations in physical retail. And while some of these experimental flagship store experiences can be incredibly engaging for customers, most of them are difficult to scale.

**“When retailers are thinking about activations in their stores, they have to consider how to impact the largest number of customers possible. It really has to be a deliberate choice to heavily invest in experiences that can only ever scale to a small subset of stores.”**

**JACKIE WALKER, RETAIL EXPERIENCE STRATEGY LEAD  
PUBLICIS SAPIENT**



“The longer we can keep customers engaged with a brand, the more likely it becomes that the customer will not only convert once but will become a repeat customer,” Alloy said. “Retailers have improved tactics to re-engage customers who abandon carts online, but there is more work to be done to extend high-touch customer service in an automated and scalable way when customers are engaging with retailers through multiple channels.”



### **CONNECTING PHYSICAL AND DIGITAL SHOPPING EXPERIENCES TOGETHER**

The best retail in-store experiences are both efficient and engaging when e-commerce and brick-and-mortar blend together. This means that at each stage of the customer journey, whether that's browsing on social media, entering a retail store or shopping on a retailer's website, customers have a blend of personalized shopping offers and experiences that are fully cohesive.

One piece of this is consistent branding across channels—from the website, to the app, to the print marketing and merchandising in the store. Keeping consistent, authentic branding in-store and online creates a better customer experience.

This relates to marketing offers, too. Customers that normally shop at a retailer online still expect to be known as customers when they enter a new channel, like the store. The key to building loyalty for retailers is matching experiences across channels to amplify the strengths of each and unify the brand. RFID technology embedded in loyalty cards, like store credit cards, retains customer information and allows retailers to identify when a customer is in a store and prompt in-store kiosks to display relevant ads.



---

## Five areas of the in-store experience that deliver the most value

From store layout, to point of sale, to checkout, retailers are working to modernize their technology and improve every touchpoint for the customer. There are five key interaction points where retailers can re-think standard methods of operating in a new era of in-store shopping—and which will bring the most value:



## Replicating digital shopping behavior

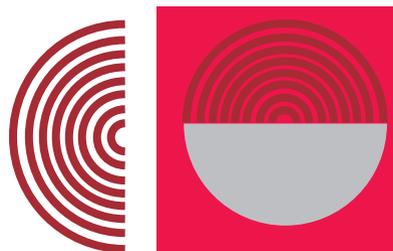
The rise in popularity of e-commerce has provided an interesting view into customer shopping behavior and needs that retailers have never had access to. While certain aspects of online shopping don't need to be replicated in an in-store setting, others are worth experimenting with.

For example, many customers use their online shopping carts as virtual wish lists. They will fill a cart with items, basically bookmarking them to go sift through them later to determine which items they'll actually purchase.

“When customers are shopping in-store and physically loading a shopping cart, it is very different than online “Add to Cart” behavior,” Alloy said. “In an online cart, it's a bit easier to compare and discard items—and watch the order total—than it is with physical merchandise.”

Another example of this customer behavior is influencer interaction and styling when it comes to clothing. Online, customers can easily see different outfit options for certain products styled by different models and influencers. In stores, retailers are still relying on mannequins to show off products.

Retailers have the opportunity to use mobile apps, as well as cart or dressing room design, to enable customers to replicate this online behavior in-store. By connecting a mobile app to in-store inventory, customers could build their “cart” on their mobile phone and even get a fitting room started, which would allow them to see their cost total, save their cart history and see clothing on real body types.





## Digital product information

In the age of the internet, customers are used to being more informed than ever before. E-commerce sites, online forums and news articles alike offer customer reviews and feedback to factor into purchase decisions.

While in-store shopping relies on instant gratification as a sales tactic, many customers still look for a higher level of product information and social proof.

Retailers can use different technology pieces such as digital kiosks, QR codes or even AR mobile apps to provide product details.



**OF CUSTOMERS SAY THEY'VE CHECKED STORE INVENTORY ONLINE BEFORE VISITING LOCATION.**



## Smart inventory

Smart, or intelligent, inventory is an often-overlooked aspect of the back-end store experience that becomes really important at the intersection of physical and digital shopping. Today, many customers want to look at real-time e-commerce and in-store inventory at the same time.

In fact, 72% of customers say they've checked store inventory online before visiting to ensure the location has what they want. One of the biggest advantages of in-store shopping is speed and immediacy, so a customer might choose to come to a store because they're looking for a specific product right then and there, and they don't have to pay for shipping.

"How annoying is it when you as a customer look on the website, see you can order something for pickup, and then two hours later, the retailer emails you canceling your order because they didn't actually have the item at the store?" Walker said.

Also, many customers will make an additional, unplanned purchase while they are in the store to pick up their buy online, pick up in-store (BOPIS) order, and the same is true of their online shopping habits. While 46% of customers shop with something specific in mind and only buy that item, 36% will get inspired to purchase more while shopping.



## Sales associate interactions

Many products, like running shoes or sports equipment, could be sold better with an explanation from a human expert. However, modern technology has the ability to elevate those interactions for both the sales associate and the customer.

**“We have reached a point where we can make it much easier for employees to better serve customers with digital tools,” Alloy said. “Armed with the right data, employees can have much better interactions with customers and create far more value.”**

Some retailers are integrating tablets into the sales experience, providing sales associates with key customer information. This not only helps customers make more informed decisions, but also makes it easier for any sales associate to continue a conversation with a customer based on previous interactions, especially as retailers struggle with staffing.



## Returns optimization

Online shopping has much higher return rates than in-store shopping, and many customers are taking those returns in-store, creating disruption. While many retailers are improving the in-store return experience for customers, it’s still a key area that’s ripe for change.

“The interplay between the online experience and the store experience when it comes to buy online, pick up in-store (BOPIS) and buy online, return in-store (BORIS) still has a lot of room for improvement, especially when combined with the rise of in-store traffic and staffing shortages,” Walker said. “There is more work for employees to deal with the needs of customers coming in from online, and the tools and processes in place don’t make those interactions seamless, which can have a negative effect on experience for all customers in-store.”

At the very least, it’s key for retailers to allow customers to return products to stores even if they’ve purchased them

online, with no added cost, and vice versa. Over 70% of customers say they’d be likely to stop shopping at a retailer that charged for shipping back return items. On top of that, customers no longer expect to wait in a long line for returns. Contactless returns or quick drop-offs are better alternatives.

As we look to the future of brick-and-mortar retail, there is more value to be found at the intersection of physical and digital. Many experiences are better in-store, and retailers need to embrace the natural propensity of customers to browse, experience products tangibly and be inspired in ways that just aren’t possible when shopping online. There is also plenty of work to be done to improve the store associate experience, which directly impacts the ability to better serve customers.

“It’s not really about thinking of the next big, cool thing,” says Walker. “It’s about application at scale and better meeting customer needs.”



# ● Retail in Web 3.0

## **WHAT DOES RETAIL LOOK LIKE IN WEB 3.0? HOW RETAILERS ARE APPROACHING NFTs, VIRTUAL REALITY AND AI**

As we head into 2023, some retailers are wondering: Is the metaverse/Web 3.0 hype dying down? When Mark Zuckerberg announced Facebook's name change to "Meta" and shared his vision for a "metaverse," the buzz and excitement around virtual societies and decentralized technology dominated industry conversations.

Now, as most consumers still have yet to explore the space, the initial hype is waning. According to recent Publicis Sapient research, about half of U.S. consumers ages 18–34 have accessed the metaverse, but nearly half of the younger demographic is still unfamiliar with the concept. However, that doesn't mean that investment or business opportunities are dying with it. In fact, now is the time that the biggest players in the metaverse and Web 3.0 space are testing virtual experiences, improving baseline technology and building talent to dominate the future internet.

It's time to test different experiences, evaluate Web 3.0 applications and look for friction points in their customer experience that these applications could solve.

---

## The metaverse of the present is not the metaverse of the future

According to AJ Dalal, Managing Director, Data & Web3 Strategy at Publicis Sapient, in five to seven years, the metaverse will not be tied to a specific world, like Decentraland or Roblox. Instead, the metaverse will be an extension of any experience layer. Any website or digital experience will have an augmented reality/virtual reality (AR/VR) component and will exist on the new Web 3.0 iteration of internet technology.

“Right now, we are seeing the first wave of innovation—of companies risking it all to solve a problem,” Dalal said. “The death of this wave, like the death of AOL or MyVista, for example, opens the door for the second wave, where innovation will have sustainable growth.”

What does this mean for retailers? Rather than investing too heavily in any one metaverse or blockchain platform, it's time to test different experiences, evaluate Web 3.0 applications and look for friction points in their customer experience that these applications could solve.

Retailers can expect to grow exponentially in three key areas in 2023 when it comes to Web 3.0 and the metaverse: non-fungible tokens (NFTs), AR/VR and artificial intelligence/machine learning (AI/ML).



---

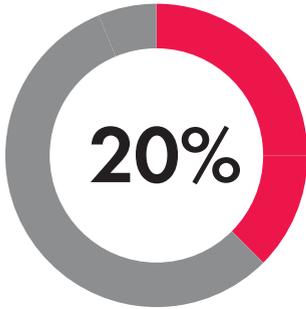
## What does Web 3.0 mean for retailers?

The third era of the web, or Web 3.0, doesn't currently exist today and, in fact, is still just an idea of what a different, improved internet could look like. While many experts have thoughts on exactly what problems exist with shopping today that could be fixed in Web 3.0, broad solutions have yet to be actualized.

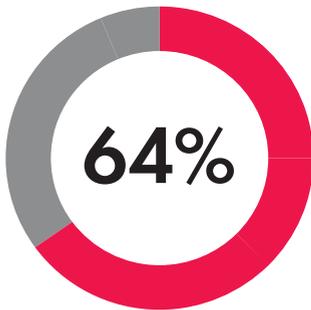
Most ideas for Web 3.0 are based on two principles: ownership and decentralized authority. Today, digital assets, as well as personal data, are

owned by large media and tech companies. While these companies rely on selling this data to advertisers, creators and consumers alike who contribute the data have little say in how any of this system works. In a decentralized model, they would take more control, or ownership, of this data.

Similarly, media conglomerates have become “walled gardens,” meaning that they don't interact with each other, creating friction between different siloed monopolies. Many experts currently building Web 3.0 are attempting to use NFTs, blockchains and AI/ML to decrease this friction and spread out ownership and authority among users.



**OF CONSUMERS PREDICT THEY'LL SOON BE ABLE TO TAKE THEIR PROFILES AND DATA BETWEEN METAVERSE GAMES**



**OF CONSUMERS WORRY THAT THEIR DATA AND INFORMATION WILL BE COLLECTED IF THEY USE THE METAVERSE.**

---

## What could Web 3.0 solve for retail?

Shopping will likely become more seamless for shoppers, making products more findable. For example, internet searchability could be improved in Web 3.0 using blockchain-based search engines. Currently, when a consumer starts a product search on Amazon and doesn't find what they're looking for, they have to start the same product search over again on Google Shopping or Walmart.com, for example. In the future, it's possible that consumers could save their searches and carry them through the different retailer websites they're browsing. In fact, 20% of consumers predict they'll soon be able to take their profiles and data between metaverse games, according to Publicis Sapient research. Another potential application of Web 3.0 could improve the management of customer data. Content creators and casual users alike aren't currently

compensated for videos or personal data by social media networks—at least not in a meaningful way. In addition, 64% of consumers also worry that their data and information will be collected if they use the metaverse. One proposition for Web 3.0 social networks is the ability to choose when and how users share their data with companies in exchange for some sort of value, including payment for content creators.

However, Web 3.0 is still just a nebulous collection of these specific use cases, nascent technology and idealistic projections. Retailers can find it difficult to determine exactly how their business should change and how to prepare for it.

## How can retailers visualize the future Web 3.0?

One way to think about the future Web 3.0 is a comparison with the creation of the iPhone and its subsequent influence on society.

Just as the Nokia of the past doesn't compare to the iPhone of the present, the future of shopping will look quite different than the emergent Web3 use cases that retailers are experimenting with today. But that doesn't mean that experimentation and investments aren't important.

Retailers can prepare for several aspects of the future of shopping that will also see significant growth in the next year.



**“In that announcement, Steve Jobs explained how the iPhone basically took what 10 devices could do and combined it into one,” Dalal said. “Think of everything that the iPhone has unlocked in our lives over the last two decades. It impacts how we do everything. What we are exploring right now with Web3 could be comparable to that innovation.”**

---

# How the use of NFTs will change for retail

Currently, only a small percentage of the population owns NFTs. NFTs became popular through specific digital art and currency uses, which haven't yet translated to broader applications. Most people aren't paying for goods and services with Bitcoin or Ethereum either, and they haven't purchased tokenized collectibles. Only 14% of U.S. consumers ages 18–34 own NFTs, and the percentage lowers to 7% for the general population, according to Publicis Sapient research.

While retailers should still prepare to accept cryptocurrency for purchases and develop digital tokens for physical products, NFTs will become much more useful in loyalty programs and inventory management. In fact, one quarter of consumers in the same study believe that brands will soon embed loyalty points and rewards within NFTs.

Loyalty programs are a major effort carried out by most retailers. Loyalty points exist as a debt— as owed products or services to customers. Currently, tracking and securely validating loyalty points and rewards

across e-commerce and physical stores in real time can be quite difficult. This is a space where blockchain technology would be especially helpful, and many retailers are starting to jump in. Starbucks, for example, has one of the world's largest and most successful loyalty programs. The chain recently announced its foray into NFTs through its loyalty programs, where members will be able to redeem NFTs for special products and experiences.

However, it's important to note that using NFTs to build out a loyalty program can't solve every problem.

"If your loyalty program is not delivering A+ results, what will change with Web3 technology that will deliver A+ results? And is that underpinned by a proper strategy and utility?" Dalal said.

**25%**

of consumers believe that brands will soon embed loyalty points and rewards within NFTs.



Consumers and brands have realized that NFTs need to offer some type of value proposition. What are customers currently engaging with that could be improved with Web3? »

AJ DALAL, MANAGING DIRECTOR, DATA & WEB3 STRATEGY

NFTs are also gaining traction in inventory management. With NFTs, retailers can code all physical products as digital twins in Web 3.0, tying online inventory with warehouse inventory and cross-store inventory to see where physical products are at all times.

Before diving in, retailers should carefully consider which blockchain technology to use. Because Web 3.0 technology is still in its early days, it's possible certain companies will develop faster and end up dominating others. Brands should test multiple blockchains by setting objectives and testing performance before choosing a blockchain and fully investing in it.

---

## How AR/VR wearables will develop

Another Web3 space that should see significant growth over the next year is AR/VR, which will be especially relevant to the retail shopping experience. Two of the biggest obstacles to the wide-scale adoption of this technology are the hardware and experience, which still aren't up to par with many consumer standards. Often

metaverse worlds and AR experiences can be glitchy with poor image quality. Most VR headsets are also a bit too bulky for daily wear.

Luckily, the technology is drastically improving. Apple is rumored to release its first VR headset next year, and Sony's PSVR 2 is heading down the pipeline as well. As this hardware and its accompanying experiences improve, AR and VR can begin to influence how customers purchase products. 20% of U.S. consumers between ages 18 and 34 currently own a virtual reality device, and 40% said they'd be likely to purchase one within the next year, according to Publicis Sapient research.

Some retailers, like luxury clothing house Hugo Boss, have already started to dive in. The company is testing AR to create digital mannequins with customers' exact body measurements to try on clothing virtually. Amazon has launched a similar feature for shoe try-on, where customers can use their phone camera to see how a pair of shoes would look on their feet from different angles. This use is also applicable to furniture. About 40% of U.S. consumers between ages 18 and 34 are interested in trying on clothes in the metaverse and visualizing other 3D products before making purchases.

"We are at the beginning of the journey in mass producing AR and VR hardware at affordable prices, which means retailers should prepare to double down on this technology," Dalal said.

While the technology isn't fully optimized, retailers can experiment with app features and other experiences to see what works best and how customers engage. This will help them prepare for a future where AR/VR is the norm in a shopping experience.

---

# How AI/ML will impact the future of Web 2.0

While much of the work dedicated to improving the web experience is focused on Web 3.0, the use of AI/ML has the ability to drastically impact the current state of Web2, and it's something retailers should invest in moving forward. Before Web3 becomes a reality, we'll likely experience a hybrid version of Web2, like Web2.5, and AI/ML will likely be able to take on work faster with limited resources.

One of the biggest use cases for AI already is targeted advertising, where automation is already efficiently powering thousands of minor decisions to personalize ad experiences online. Other uses for AI are currently still in their beginning stages but are steadily improving.

For example, while most advanced AI-powered chatbots can hold conversations with customers, they still haven't reached the level of service of a human employee. Similarly, AI writers or content generators can help optimize content and even generate copy for them in some instances. Still, these chatbots can't yet create longer stories or articles on their own.

While most retailers shouldn't rely on AI to generate photos, text or hold all conversations with customers, the technology will likely improve enough to be able to take over the majority of these responsibilities in the future.

However, many retailers and tech startups have already started to experiment in the AI space with personalized shopping. Pinterest acquired a shopping app called THE YES, which allows customers to browse through pieces by swiping right or left while a supporting AI learns customer preferences and curates better selections. Rather than creating increasingly complex filters to facilitate the shopping experience, retailers could rely on AI to create intelligent shopping algorithms to deliver individualized experiences.

According to Dalal, while AI is helping to support functions like this in Web 2.0, much of the workforce could then transition to building out new shopping experiences fit for Web 3.0.

"There are a lot of AI applications that can be used to foster growth in Web3 and maintain the existing world of Web2. People talk about how their jobs will be at risk, but that's not really the case. Your job may just shift to focus on Web3, and AI/ML can continue content for Web2," Dalal said.

**Retailers can embrace this innovation by testing and experimenting with NFTs, AR/VR, metaverse experiences and AI/ML today while still knowing that these technologies are in their infancy and will continue to evolve.**

---

# Preparing your company for Web 3.0

Just as e-commerce and Web 2.0 have transformed the retail industry, Web 3.0 is poised to do the same more excitingly. While many experts are focused on the initial hype—and even fear—surrounding the buzzword, a significant opportunity to make the shopping experience better lies ahead.

“It’s like rolling a snowball down Mount Everest. Shoppers won’t be limited to a phone, laptop or other device, and we can take digital shopping across all of our senses, including touch, hearing and sight. This is a monumental opportunity in our world,” Dalal said.

Retailers can embrace this innovation by testing and experimenting with NFTs, AR/VR, metaverse experiences and AI/ML today while still knowing that these technologies are in their infancy and will continue to evolve.

What’s most important for retailers is understanding the current limitations of Web3 technology yet still choosing to solve a business use case and build a new architecture around it.





## Next starts now.

To get started, please visit [publicissapient.com/retail](https://publicissapient.com/retail)

Or contact us anytime:



**SUDIP MAZUMDER**

Retail Industry Lead, North America  
[sudip.mazumder@publicissapient.com](mailto:sudip.mazumder@publicissapient.com)



**GUY ELLIOTT**

Retail Industry Lead, EMEA & APAC  
[guy.elliott@publicissapient.com](mailto:guy.elliott@publicissapient.com)



publicis  
sapient

Publicis Sapient is a digital business transformation partner helping retailers like Carrefour, Pandora and Falabella get digitally enabled, both in the way they work and the way they serve their customers. As digital pioneers with 20,000 people and 50+ offices around the globe, our experience in technology, data sciences, consulting and customer obsession enables us to evolve our clients' businesses with products and services that put shoppers first.