



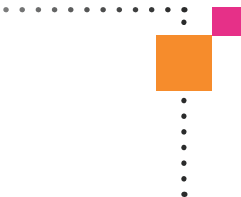
5 AI-powered strategies for ecommerce personalization.

Hyper-personalized experiences are within reach.

A man with a beard and glasses, wearing a blue button-down shirt, is sitting at a desk and looking at a laptop. The background is a blurred office setting. Overlaid on the image are several UI elements representing AI-powered ecommerce personalization. On the left, a white panel titled 'Generated headline (Engaging)' contains five buttons: 'Summarize', 'Elaborate', 'Simplify', 'Rewrite', and 'Change tone'. On the right, a product card for 'Pegasus Super Cushion' sneakers is displayed, featuring a large image of a sneaker, a recommendation text 'Recommended for people who love colorful sneakers!', and a price tag of '\$100'. A dashed orange line connects the product card to a gear icon in a circle on the right. The entire scene is set against a vibrant red background with colorful geometric shapes (purple, pink, black, green) and a small white square icon in the upper left.

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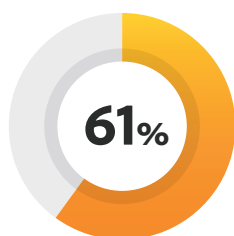
With personalization, act natural.

There was a time when it was a true spectacle to have a robot make your latte. You'd tap on a screen to select your order. The robot would spring into action, whirring its mechanic arm through the steps of grinding the beans, pulling the espresso shot, and frothing the milk. And what you'd receive is a latte that was, well, just okay.

Instead of employing robots to do human tasks, customers are looking for online shopping experiences to feel human. Just as when the barista starts making their order before they reach the counter (double shot of espresso with oat milk, extra foam), they want brands to cater to their interests. In online shopping experiences, that translates a couple ways. It could be landing on a brand's website and being met with products and experiences that feel curated just for them. Or it's engaging with the brand through curated journeys that meet the customer in their own context.

The goal of personalization is to make every customer feel understood through natural experiences. And while it's attainable, it has to happen in real time for millions of individuals in the moment. Not to mention that the already large demographic of online shoppers is on the rise. According to Accenture, more than 1 billion digitally astute consumers will enter the market over the next decade. Meeting the individual needs of each of those customers? That's a tall order.

In case you're not already convinced of the importance of digital commerce, let's walk through some more data. According to IDC, 95% of organizations agree that "we are living and competing in a digital-first world." Based on the report, the most important business priority driving digital experience investments is customer satisfaction, and over 61% of businesses worldwide will increase their spending on customer engagement applications this year.



61% of businesses worldwide will increase their spending on customer engagement applications this year.

Source: IDC

With so much demand, organizations need to find ways to get online shopping experiences right. But to do it at scale, they're going to need some help. That's where artificial intelligence (AI) steps in.

In this guide, we'll look at the current state of digital commerce and explore five ways that AI can deliver the personalized ecommerce experiences that customers have come to expect.



The opportunity to personalize is calling.

Let's start with the basics, like what personalization actually is. Personalization is using data to understand what a customer needs and building experiences that address those needs in the right moments. For first-time customers, this might look like:

- Easy navigation
- Real-time relevant recommendations
- Messaging tailored to their needs
- Targeted promotions

These are examples of basic segmented experiences. As brands mature their personalization strategy and start to learn more about individual customers, they can create experiences that feel more unique to them.

Personalization is a spectrum.



Undifferentiated, static experiences

Same experience for every customer



Basic segmented experiences

Simple customer groups based on high-level segmentation



Micro-segment personalization

Targeted experiences based on refined segments



Real-time 1:1 personalization at scale

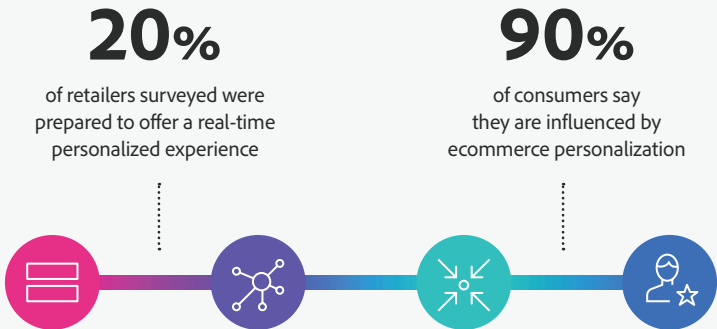
Dynamic experiences for each customer in real time

Being able to deliver experiences that have been personalized specifically for each customer is the gold standard. Not only can it help turn customers into loyal fans, but it can also show up in a business's bottom line. Deloitte Digital found that personalization leaders have seen a 1.5 times increase in revenue per customer and have twice the customer engagement. These leaders have also seen a 30% or greater increase in conversion by providing personalized experiences, according to Algolia.

While getting personalization right can have a major impact, it's easier said than done. Algolia found that only 20% of retailers are prepared to offer personalized experiences in real time.

Despite the lack of personalization maturity, plenty is on the line. Dynamic Yield reports that 90% of consumers say they are influenced by ecommerce personalization. What's more, Twilio found that two-thirds of consumers say they will quit a brand if their experience is not personalized, and 57% of consumers claim they will spend more money with a brand that personalizes their experience.

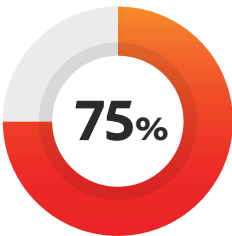
The personalized experiences gap



This gap reveals a major opportunity for brands to make more human connections with their customers. For many brands, it reflects a lack of technology and resources just as much as it does an immature personalization strategy.

When it comes to challenges that prevent companies from effectively using personalization, three are top of mind. The first is data complexities. According to 451 Research, 75% of brands cannot act on their data in real time. The second is tech stack fragmentation. Incisiv found in partnership with Adobe that 58% don't have the tech to support their strategy. And the third is siloed teams and people shortages. For this challenge, Deloitte Digital found that 74% lack the in-house talent needed to support a strong personalization strategy.

Technology, resources, and strategy are all intertwined in getting personalization right. Now that we've established the state of personalization, let's explore how to use AI to achieve it.



75% of brands cannot act on their data in real time.

Source: 451 Research



Five strategies to bring AI into the mix.

Companies that excel in personalization do two things well. First, they have a clear strategy. And second, they rely on AI and machine learning (ML) to get it done at scale. We're going to explore both by understanding how AI can inform your personalization strategy.

AI is a hot topic, and there is already strong data pointing to its benefits. According to *MIT Sloan Management Review*, employees that use AI are more competent in their roles, autonomous in their actions, and more connected to their work, colleagues, and customers. And that's consistent across industries. Their study also found that 60% of workers see AI as a coworker and that workers who find value in AI are 3.4 times more likely to be satisfied with their jobs. AI is here to help make everyone's jobs easier—not do their jobs completely for them.

60%

of workers see AI
as a coworker.

3.4x

Workers who find value in AI are 3.4 times
more likely to be satisfied with their jobs.

Source: MIT Sloan Management Review

AI is a powerful tool that helps brands step into their customers' shoes and gain their perspective before delivering experiences that are a better fit for their individual needs and contexts. And importantly, it can be the difference for ecommerce brands that are looking to deliver hyper-personalized experiences at scale.

Let's get into it and explore five ways to use AI for ecommerce personalization.

5 ways to use AI for ecommerce personalization



Segment customers

- Identify and create valuable segments
- Automate segment qualification



Facilitate product discovery

- Optimize search experience
- Optimize browse experience
- Deliver relevant product recommendations



Create personalized content

- Automate manual content workflows
- Produce content variations to use across channels



Deliver content and offers

- Deploy personalized content
- Personalize promotions and offers
- Test and optimize



Deliver next best interactions

- Determine & deliver the next best experience
- Target key KPIs

STRATEGY 1

Use AI to segment customers.

At its core, personalization is about using customer data to create and deploy experiences tailored to customers' unique needs and contexts. Many organizations lean on segmentation to bring the right kinds of experiences to the right groups of customers. This is where tools like [Adobe Commerce](#) create a solid foundation for your ecommerce personalization strategy. It allows you to take rich commerce data, including behavioral data like clicks on your site, transactional data like purchase history, and data on customer demographics, and unify it all within integrated customer profiles. From there, you can create rule-based segments based on those profiles to create personalized experiences.

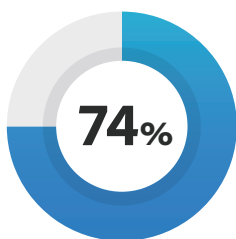
But if organizations want to take their marketing and merchandising to the next level with hyper-personalized experiences, they need to lean more heavily on both online and offline customer data from many sources to create more specific segments. That's where AI can help.

AI helps segment customers by:

- Identifying and creating valuable segments without involving a data analytics team.
- Augmenting segment qualification in real time.

Identify and create valuable segments.

Organizations have a lot of data. This includes real-time behavioral and transactional data like items viewed on the site, categories browsed, and historical purchases. Instead of throwing somewhat relevant experiences at groups of customers, 74% of personalization leaders use AI models to easily identify and create segments without involving data analytics teams, according to Forrester Consulting.

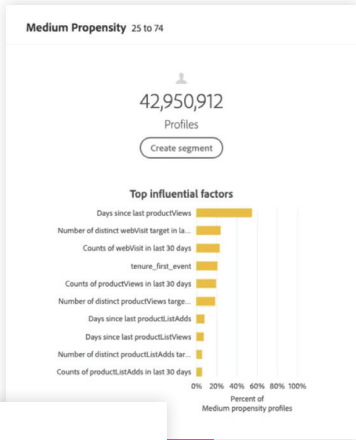


74% of personalization leaders create segments using predictive models.

Source: Forrester Consulting

AI tools like [Customer AI](#) within [Adobe Real-Time Customer Data Platform](#) feed customer behavioral data (like ads clicked, emails opened, in-store activity), ecommerce data (like product views, preferences, past purchases, returns), and data from other sources (like loyalty data from CRM systems) into models that score customers' likelihood of taking certain actions in the future. In the world of ecommerce, this is called a propensity score. Using this data, merchants can create propensity-based segments with just a few clicks. And because Real-Time CDP is integrated with Adobe Commerce, they can then personalize shopping experiences based on those segments.

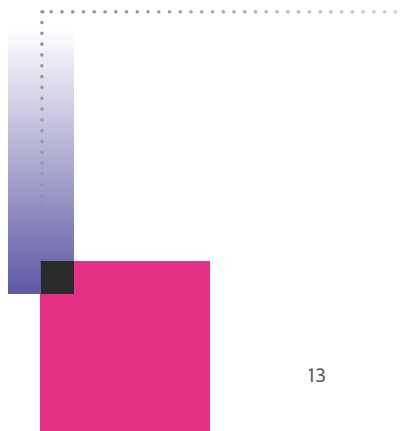
Let's pause to address a lingering question. Often, AI is seen as a black box. It gives insights like propensity scores, but it's difficult to understand why those insights are made in the first place. Customer AI solves this problem. Not only does it tell you a customer's likelihood of buying, but it also explains why they're likely to make a specific purchase by mapping insights back to specific data points and customer behaviors. That way, AI remains a tool you can work with—not one you need to depend on.



Augment segment qualification in real time.

Customers' needs are always changing, and that means the experiences that resonate with them one day won't always do the trick the next. Let's take the example where someone buys a new pair of hiking boots online. Suddenly, they're bombarded with ads and promotions for different pairs, none of which are relevant to them anymore.

In addition to identifying and creating powerful segments, Real-Time CDP can automatically shift customers from one segment to another in response to real-time behaviors. Let's go back to our hiking boot example. Customer AI can understand a customer's past purchase behavior and place them in a high propensity segment for complementary products, such as thick socks that match their boots. That way, the brand can deliver a much more relevant and helpful experience at each stage in their shopping journey.





STRATEGY 2

Use AI to facilitate product discovery.

The ways in which people shop online are as diverse and unique as the customers themselves. Nearly 40% of customers go right up to the search bar when they go to a website, according to Algolia. The rest either rely on product recommendations or category browsing to find products that fit their needs. AI can play a role in all three to meet every customer with the right experience.

AI can facilitate product discovery by:

- Optimizing search experiences
- Enhancing browsing experiences
- Delivering the right product recommendations to each customer

Optimize search experiences.

Even though a large portion of customers use search, many companies struggle with making it a personalized experience. In fact, Baymard Institute found that over half of top-performing ecommerce sites have weak search performance, despite Algolia finding that customers are twice as likely to buy using this method.

The challenge is twofold. Businesses aren't able to incorporate enough shopper context into the results, and they're not using AI to shape which results are pushed to which customers. Both can be addressed with [Live Search](#), a Commerce capability powered by [Adobe Sensei](#), which uses AI-driven capabilities powered by Adobe Sensei to personalize and optimize ecommerce site search.

>50%

of top-performing
ecommerce sites have
weak search performance

Source: Baymard Institute

2x

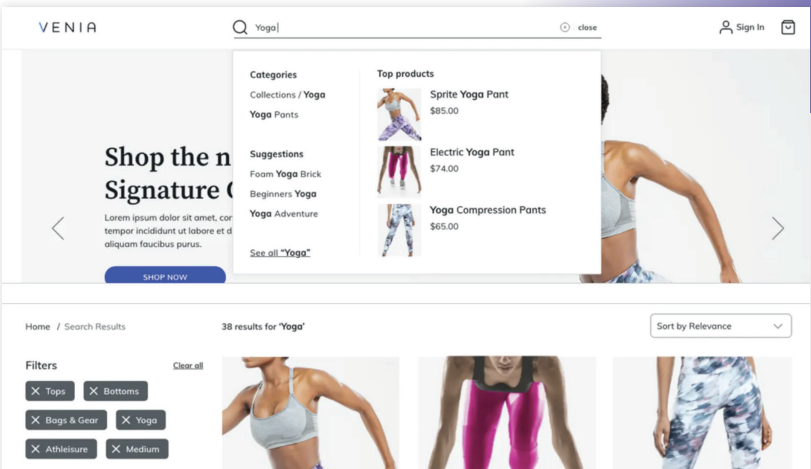
Likelihood of customers
to buy when using search
over other shopping methods

Source: Algolia

Live Search makes suggestions as customers type, seamlessly handles typos, and offers synonyms when shoppers use different terminology than the brand uses—like searching for “jacket” instead of “coat.”

Even more powerfully, Commerce can use behavioral data to intelligently rank search results into a one-to-one experience for every single customer. For example, if a shopper spends time in the “running gear” section of the site, when they search “pants,” Adobe Sensei algorithms can re-rank search results to put running pants ahead of denim pants for that shopper in real time. Likewise, if another shopper spends their time in the “beachwear” section, they will see search results for linen options at the top.

When searching for a product in a large catalog, shoppers often need help narrowing their search to the products they are looking for (like colors, sizes, materials, types, and more). Commerce uses the power of Adobe Sensei to reorder the filters and facets that appear on the page. When a customer searches or wants to navigate between pages, Live Search picks the most relevant filters, and selects for every product so that merchandisers don’t have to individually set those filters.

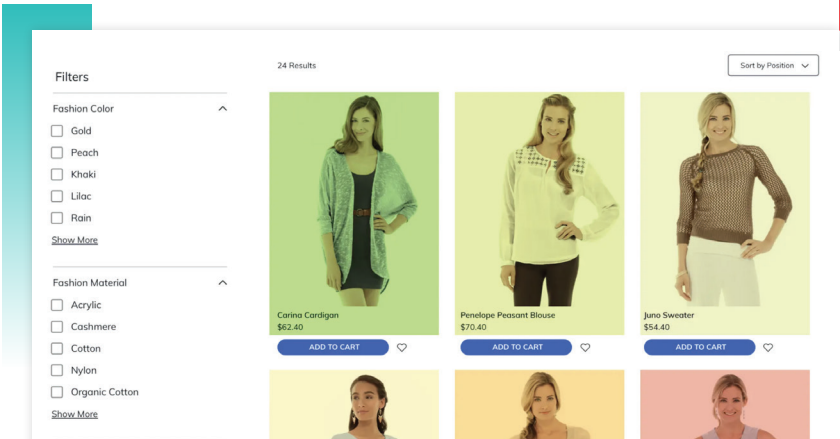


Enhance browsing experiences.

While many customers turn to the search bar, NP Digital reports that 60% of shoppers prefer using on-page navigation to find the products they need. That means using AI to deliver a sophisticated, personalized browsing experience is important to boost conversion and customer satisfaction.

Coming later in 2023, Adobe Commerce will intelligently rank the product order on category browsing pages in the same way it ranks them in search. Let's go back to our example of a customer searching for pants. Instead of typing into the search bar, this time they've clicked on the pants category page in the navigation menu of a retail site. Based on category and product affinities scored by AI, the product order shown on the page will be personalized for everyone individually, so this customer will again see running pants at the top of the page.

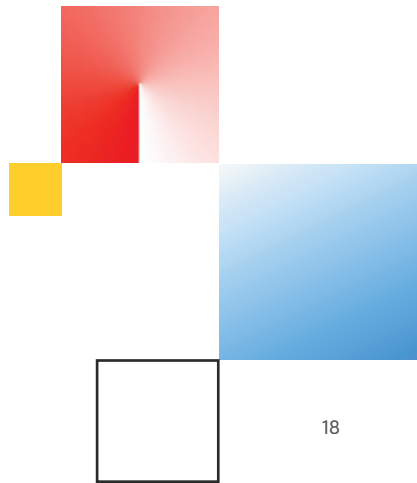
Additionally, [Adobe Target](#) can personalize ecommerce site navigation with the categories that a customer might care about most. For example, if a customer only looks at "women's" categories, those categories can be positioned first in navigation menus to expedite their hunt for relevant products.



Deliver the right product recommendations to each customer.

Product recommendations are the third piece of the product discovery puzzle and provide an excellent opportunity for AI optimization. Many companies today do not use any customer segmentation to inform their product recommendations. There is a major opportunity here, considering a report by Twilio Segment found that product recommendations can account for up to 31% of ecommerce revenues.

Using segmentation to deliver highly relevant product recommendations in response to shopper behavior is incredibly powerful. And again, brands can use Commerce powered by Adobe Sensei to meet customers with the right experiences. Let's once again visit our earlier example of a customer who shops for running gear. That shopper may be placed in a "runner" segment. The site would then update product recommendations to prioritize running apparel in each category the shopper visits.



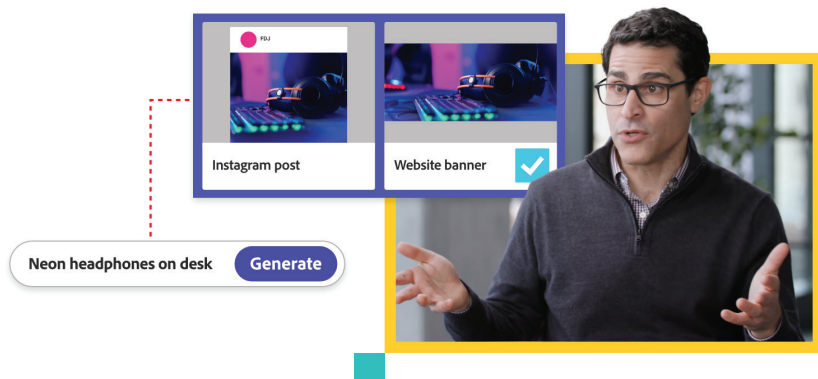
STRATEGY 3

Use AI to create personalized content.

Creating personalized content can feel like you're always playing a game of catch up. Sure, it's great to produce the micro-segmentation we've covered so far, but those segments lose their value if you can't create unique and hyper-personalized content for each of them. This is made more complex by the number of channels, regions, and individualized customer preferences that give content its own look and feel.

AI can help create personalized content by:

- Producing personalized content with automated workflows
- Producing content variations across channels



Produce personalized content with automated workflows.

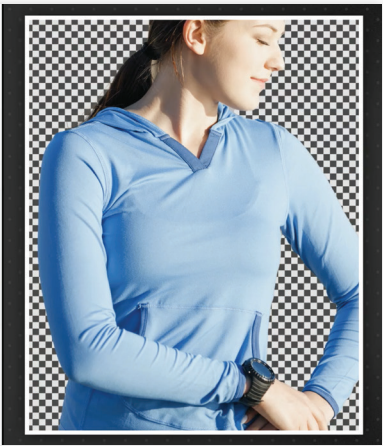
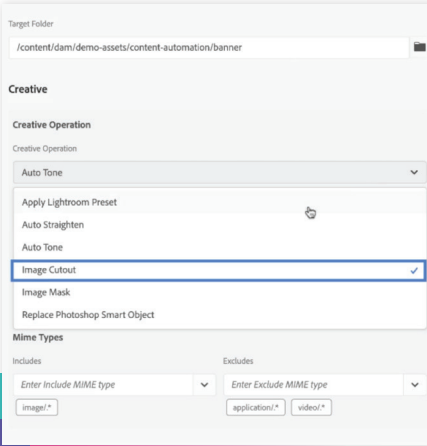
Imagine having content that reflects the exact interests of every customer who visits your website. With AI, that's not too far off from reality.

By integrating with [Adobe Creative Cloud](#) and harnessing the power of Adobe Sensei, [Adobe Experience Manager Assets](#) produces and personalizes content using automated workflows. For new assets, Experience Manager Assets supports content creation by removing backgrounds, replacing objects, cutting out pieces of existing images, and placing them within existing brand assets. For creating 3D models or a series of 2D images of products, there's also [Adobe Substance 3D](#) that eliminates the need for brands to engage in lengthy product photoshoots. Once assets are created, Experience Manager Assets uses the AI capabilities of Adobe Sensei to identify objects in each asset and tag them, making them easy to find and deploy on ecommerce sites.

Produce content variations across channels.

The more content you can create, the better your shopping experiences will be. But it's not just about creating a higher volume of content. It's more specific than that. You'll need to create many variations of each content piece for different channels and devices, and then personalize each one to different customers.

Experience Manager Assets works together with Creative Cloud and Adobe Sensei to bring prebuilt content automation to marketers and creatives. It enables you to automatically remove backgrounds, replace smart objects, and crop, re-size, and generate variations for channels such as web, mobile, and email. That way, designers don't need to spend time fiddling with mundane edits. Instead, other teams like downstream marketers can make changes quickly and deliver personalized content in just the right contexts.





STRATEGY 4

Use AI to deliver and optimize content and promotions.

When it comes to deploying the right content, you're putting your AI-generated segments to the test. Delivering the right content to the right customer at the right time is the gold standard. And if you do it correctly, you'll be in good company. According to Forrester Consulting, 75% of leaders personalize experiences based on a customer's real-time behavior.

AI can help deliver and optimize content and promotions by:

- Deploying personalized content and promotions
- Optimizing content and promotions over time

Deploy personalized content and promotions.

When shoppers engage with brands' websites, content needs to be relevant and feel organic within the shopper's current context. For example, if a shopper is looking for an iPhone but the home page of an electronics brand is all Samsung branded, a shopper may click away and look elsewhere. That means content must be shown in a way that adapts to current in-session actions taken on the site and blend it with historical data about the customer.

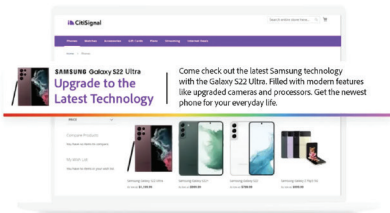
The new [Audience Activation extension](#) works as an integration between Real-Time CDP and Commerce. It allows marketers to deploy dynamic content blocks and cart price rules in real time according to AI-powered segments that have been created and managed within the platform. Which is all to say that the right content gets delivered to customers in the right segments, even as those segments are dynamically updated.

The same is true for promotions. As with content, promotions can be used as a valuable tool to drive conversion, but only when they are offered to the right customers who might need an extra nudge to make a purchase. The new Audience Activation extension can use a customer's behaviors to inform propensity-based segments. If the stars align, the platform will suggest a targeted promotion that's most likely to peak that customer's interest.

Personalized Content

Dynamic Blocks

Deploy content in real time based on a shopper's in-session actions.

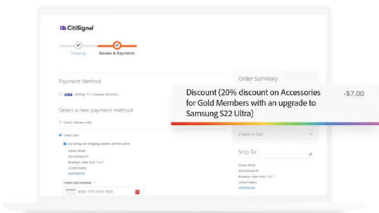


Example: If a shopper is browsing for Brand X, give them a home page, category page, and PDP featuring Brand X.

Personalized Promotions

Cart Price Rules

Deliver hyper-relevant promotions to convert while retaining margins.



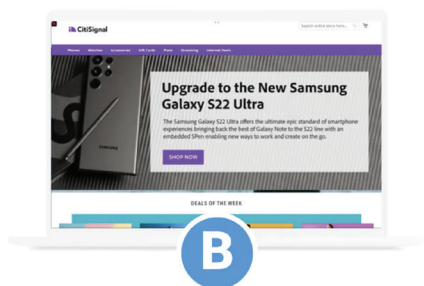
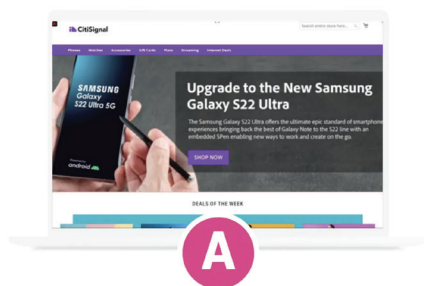
Example: If a shopper has shown they are open to add-ons in the past, deliver a 20% discount on high-margin accessories.

Personalize content and promotions in real time with Audience Activation.

Optimize personalized content and promotions over time.

Personalization is an ever-evolving practice. While one strategy may be working with a segment initially, there's always room to make tweaks that will result in experiences that resonate better as your customers' needs and contexts change.

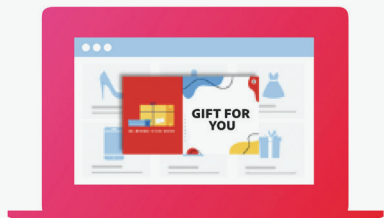
A powerful way to test the impact of content and promotions is to conduct multivariate testing. For example, Adobe Target can send a banner or promotion to different audiences and then automatically pick the winner of the test. From there, it'll use those results and drive more traffic to that winner. That way, customers continue to feel understood while brands unlock new insights about how to best serve them.



Adobe Target can conduct A/B or multivariate testing to determine the most effective content for each shopper.

Create offers based on customer segments:

Segment: First-time visitor



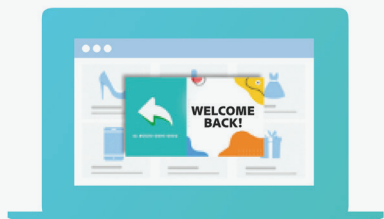
Customer data:

- No shopper visits
- No shopper purchase history

Strategy:

- Show first-time offers
- Show highest converting products

Segment: Win back



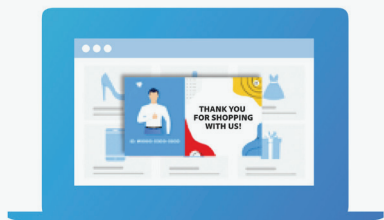
Customer data:

- Shopper has recent returns
- Shopper has not visited in a month
- Shopper buys premium products

Strategy:

- Show win-back offers
- Show premium products

Segment: Loyal



Customer data:

- Shopper is highest loyalty level
- Shopper buys high-margin items
- Shopper not promotionally motivated

Strategy:

- Show no promotions
- Show high-margin products



STRATEGY 5

Use AI to deliver the next best interaction.

Commerce experiences aren't linear. A customer may click on a social media ad for new sunglasses, and then open their web browser to check out different styles. Maybe they shop around a bit and test out a new augmented reality try-on feature, but then get distracted by a text they receive. Later while on their desktop, an email from the same brand reminds them of their earlier journey, this time offering free shipping on their first order. They open the website again, and this time click add to cart.

Orchestrating all these touchpoints manually, without the support of AI, can feel like an impossible task. It often results in a fragmented and inconsistent customer experience. Further, merchants often need to rely on data teams to understand the interactions between various touchpoints. Bringing AI into the mix can empower marketers to put the next best experiences forward.

AI can help by:

- Delivering the next best experiences and targeting KPIs.

Deliver the next best experience and target KPIs.

The next best experience is one that considers a customer's entire journey, as well as their needs, to create a personal and contextual interaction. More often than not, these paths don't follow a preset, linear marketing path. While diverging behaviors are exactly what make customers unique, they also make it more difficult to decide what next experience is going to be the right one.

[Adobe Journey Optimizer](#) can help by using real-time customer data to rank each message for a given customer, and then adjust as the customer engages with the brand. This accounts for both the kind of content and the way it's delivered, including across apps, devices, screens, and channels. And because it's meant to be so personalized, Journey Optimizer also has a message designer that can create unique email and mobile messages with drag and drop interface and easy-to-edit templates. That way, marketers can quickly create anything from a weekly promotion to a tailored push notification for an item that was previously out of stock, and then use AI and ML to send messages at the moments when those customers are most likely to engage.

The goal of delivering next best experiences is to keep customers engaged on their own terms. With Journey Optimizer, marketers can make the most of customer satisfaction while still hitting their business goals by using models that optimize based on prioritized key performance indicators (KPIs). So, if a brand is looking to maximize its conversion rate or revenue, Journey Optimizer will consider experiences that target high-value customers and point them in the right direction without sacrificing the moments that will resonate best with them.

Let the right technology be your copilot.

Achieving hyper-personalized experiences may seem complicated, but it doesn't have to be. Instead of getting overwhelmed, consider using AI to simplify the process. AI can automate, coordinate, deliver, and optimize personalization efforts, making it easier for you to transform your business and enhance customer experiences. With personalization tools that integrate with your existing technologies and data, you can achieve strong results without getting lost in complex technology or workflows.

Adobe Commerce provides a range of powerful personalization tools, including segmentation, Live Search, Product Recommendations, personalized content, and promotions. By integrating Adobe Commerce with other Adobe Experience Cloud products like Adobe Real-Time Customer Data Platform, Adobe Experience Manager, Adobe Target, and Adobe Journey Optimizer, you can enhance your AI-driven personalization capabilities in the ways that match your business goals.

[Learn more](#)

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