**Wall Street Journal**

**Retail Turns to Silicon Valley**

By

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Jan. 20, 2017 11:19 a.m. ET

In the age of [Amazon.com](http://quotes.wsj.com/AMZN) Inc., other retailers are scrambling to find a way to keep consumers shopping on their sites and in stores.

The trick? Personalization, via data and tech.

Sunglass Hut is employing deep learning and image-recognition technology from San Francisco-based Sentient Technologies Holdings Ltd. for its e-commerce site. When a shopper clicks on a pair of shades, the “see similar styles” option uses image recognition to show other sunglass choices, instead of predicting what the person might want based on what other people have purchased.

Personalization “is the Holy Grail,” says [Salesforce](http://quotes.wsj.com/CRM) Commerce Cloud Chief Executive Jeff Barnett, who works with brands including [L’Oreal](http://quotes.wsj.com/OR.FR) and [Under Armour](http://quotes.wsj.com/UAA).

With online pricing and inventory easily accessible, consumers are increasingly becoming brand and retailer agnostic. So retailers are turning to Silicon Valley for everything from artificial intelligence to data to draw consumers in.

Deep-pocketed Amazon has been investing in technologies like these for years, aiming to make it easy to find items and click buy. Tech providers are filling that gap for other traditional retailers that don’t necessarily have the means to do the same.

Even the smallest changes online—facilitated by artificial intelligence and algorithms—can make a difference in sales, retailers are discovering.

Using Sentient’s technology to run multiple tests at once, Italian lingerie brand Cosabella gauged customer response to change the color of its “buy” button to pink and its banner to specify it is Italian family-owned, bumping up revenue by 38%. It is also using image-recognition technology similar to Sunglass Hut, tailoring its website to individual customers based on the advertising image they click to get to the site.

“I don’t think AI will eventually take over everything, but it will rationalize some of what we do,” said Cosabella CEO Guido Campello.

Retailers are also customizing the shopping experience in stores, where around 90% of U.S. purchasing still takes place.

Technology giant [SAP SE](http://quotes.wsj.com/SAP.XE) is working with retailers on technology to help identify customers and their likes and dislikes as soon as they walk into a store, creating more of a shopper experience, said Lori Mitchell-Keller, global general manager of consumer industries.

For example, [Burberry Group](http://quotes.wsj.com/BRBY.LN) PLC can ask for a customer’s name and type it into an app when the person walks in, giving access to personal data, including his or her last purchase and whether the person prefers still or sparkling water—and potentially some of his or her public social media presence, too.

“If they understand you, they know how to interact with you and how to advertise to your likes,” said Ms. Mitchell-Keller.

Amazon has been customizing and refining its site for shoppers for years using deep learning and artificial intelligence—something it touted at its Amazon Web Services conference late last year, when it introduced new offerings for customers based off its expertise. On its retail site, that technology enables better search results and recommendations for customers, among other benefits.

Still, it is unclear how willing some retailers are to embrace something that goes beyond algorithmic search recommendations and into true customization, in part because it requires merchants letting go of control over some aspects of the shopping experience, says Ken Seiff, managing partner at early-stage retail technology venture-capital fund Beanstalk Ventures and a former retail executive. “It’s probably the single biggest lift that retailers could get if they actually embraced it.”

Tracy Issel, general manager of world-wide retail at [Microsoft](http://quotes.wsj.com/MSFT) Corp., says she sees signs that retailers are diving in. She points to retailers such as [Nordstrom](http://quotes.wsj.com/JWN) Inc.’s discount Rack chain, which is now piloting in-store beacon technology that will direct shoppers to express checkout lines or alert them when a fitting room opens up via an app on their phone with Bluetooth turned on.

“Digital transformation is upon you whether you want it or not,” Ms. Issel says.