



Technology is a game changer in the retail industry. New advancements bring easier access to products and easier brand advertising.

The entire retail market looks completely different from how it did just a few years ago – from brick-and-mortar and online to mobile and voice-based search.



Store closures are a major theme in U.S. retail, as many overspaced retailers are reacting to the migration of sales online by closing physical locations.

DEBORAH WEINIG, Corelight Research CEO & Founder



technologies changing retail



Physical Showrooms For Online Sales – Bonobos, a popular menswear e-tailer has a “guideshop” where customers can come in and try on clothes but cannot leave with the items. Instead, the staff will place the order online and have it shipped to the customer’s home. Returns can be made at Bonobos’ local guideshops. High-end shoe retailers Paul Evans and Jack Erwin also use this approach.



Smart Mirrors – Herman-Mercus uses a mirror that is actually a camera and screen that records an eight-second video to provide a 360-degree view of how a piece of clothing looks on. It also provides a side-by-side comparison of how a shopper looks in two different dresses.



Augmented And Virtual Realities – Manxnet, a top in-store virtual solutions company uses VR technology to help customer visualize home improvements. Imit and Anthropologie uses AR apps that let customers get a visual representation of how an item would look in their homes.



Checkout-Free Stores / Contactless Shopping – Sam’s club, a membership-only retail warehouse and Amazon’s Amazon Go uses a self-checkout app that lets consumers enter by scanning a code on their app, pick up items they want, and then leave. The app’s sensors, computer vision, and deep learning track the items and automatically bills the shopper.



Facial Recognition – A KFC in Hangzhou, China launched a face-based payment via Alibaba’s Ant Financial payment platform, Alipay. Diners place their order at a terminal, which then scans their face. If it matches the image on the photo ID stored in the system, the customer only has to enter their phone number and the payment goes through.



Voice-Based And Visual Search – Retailers including Dunkin’ Donuts, 1-800 Flowers, Domino’s, and Starbucks have created Skills for Amazon’s Alexa that lets consumers order items on Echo and other Amazon-based devices. Google on the other hand, introduced Google Lens, which lets users point to an item and receive an explanation of what it is. It is a person uses someone sporting a nice pair of sneakers, for instance, Google Lens could tell her the brand and where she could buy it.



Chatbots – In 2016, Facebook opened Messenger to brands, which opened chatbot for 1-800 Flowers, Starbucks, Whole Foods and many others. Sephora’s chatbot, for instance, lets you book appointments with a beauty specialist at the store and get help with purchasing decisions. MeowMe, Whole Foods’ chatbot offers recipe advice.



Drones – Amazon completed its first Prime Air drone delivery in the UK under a limited trial program involving only two beta customers, indicating plans to expand the pilot to more customers living within a few miles of its Prime Air fulfillment center in Cambridge. 7-Eleven also offers drone deliveries in Reno, Nevada.



Artificial Intelligence – Amazon, Alibaba, JD.com and Zalando use AI enhancements to help generate precise product search results and display virtual storefronts tailored to individual shoppers, based on their unique characteristics and preferences.



Blockchain – De Beers, the world’s biggest diamond producer by the value of its gems, aims to launch the first industry-wide blockchain this year, to track gems each time they change hands from the moment they are dug up from the ground. The technology could be used to verify the authenticity of diamonds and ensure they are not from conflict zones, where gems could be used to finance violence.

The rise of these digital transformations puts **pressure** on traditional retail stores and forces them to make huge adjustments.

A store like Macy’s could never have a 2,000 square feet store in an urban downtown or urban core. All of a sudden you can do all that now with virtual reality.

BECK BESECKER, Manxnet CEO & Co-Founder



Customers are expecting **faster, more responsive services** and are increasingly looking for ways to automate shopper experience. In response, retail companies are **adapting to changing technologies** in order to stay relevant.