

This edition of NRF's Consumer View looks at how technology is transforming consumers' path to purchase right now and its potential to solve shoppers' pain points in the future.

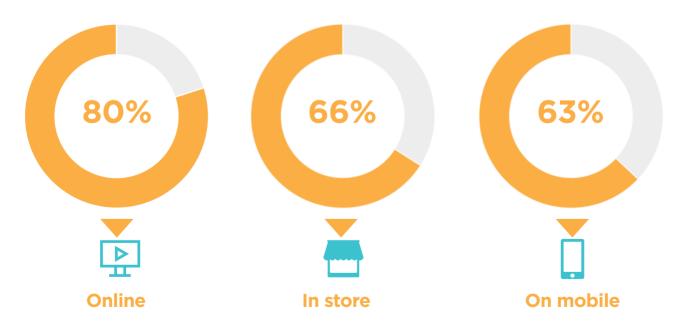
According to a 2019 report from NRF and IBM, intelligent automation — the marriage of artificial intelligence with automation — is reaching critical mass. By 2021, an estimated 80 percent of retail and CPG executives expect to be using intelligent automation in areas from supply chain and product design to customer acquisition and retention.



More than 3 out of 5 say retail technologies and innovations improved their shopping experience

But while much of the focus is on the future, technology has already made significant strides in transforming the retail experience.

Percent who agree that shopping technologies and innovations improved their experience:



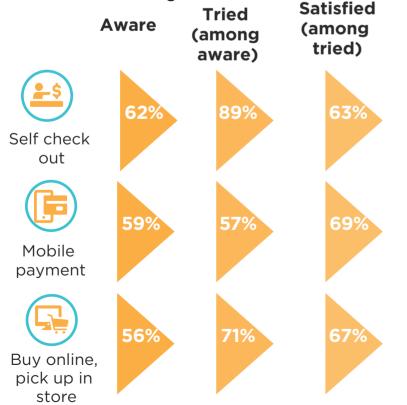


Despite the gains from retailer investments in technology, there continue to be opportunities to improve the shopper path to purchase.

The majority of consumers say they find the steps leading up to a purchase — when they are first researching products, comparing reviews and checking prices — to be the most frustrating. This is also where they are most open to trying new solutions and innovations.

It is not coincidental that consumer frustration goes down significantly at the point of purchase. Whether it's buy online, pick up in store, mobile payment or self-checkout, consumers have embraced the retailers' investments in solutions that simplify their checkout experience.

Consumer awareness, adoption and satisfaction with retail technologies:







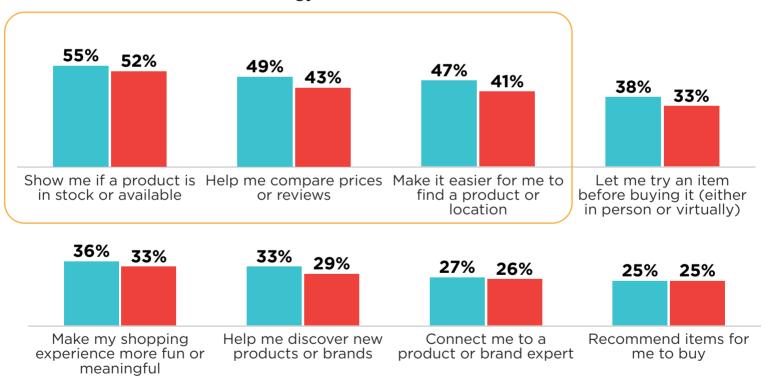
Consumers have definite opinions on how retailers can streamline the pre-purchase experience.

Roughly half of consumers are very interested in solutions that take the uncertainty out of shopping — whether that's knowing that an item is in stock or getting accurate information on prices and reviews. The ability to address these needs is already shaping consumers' decisions on the brands and retailers they shop.

Right now, consumers are primarily interested in the use of technology to meet their most basic, tactical prepurchase needs. That is not to say that personalization or retail-tainment is not on shoppers' radar, but they want retailers to deliver on the basics and take uncertainty out of the process first.

Consumers want retailers to focus on technologies and solutions that take the guesswork out of the pre-purchase experience

Issues consumers look to technology to solve:



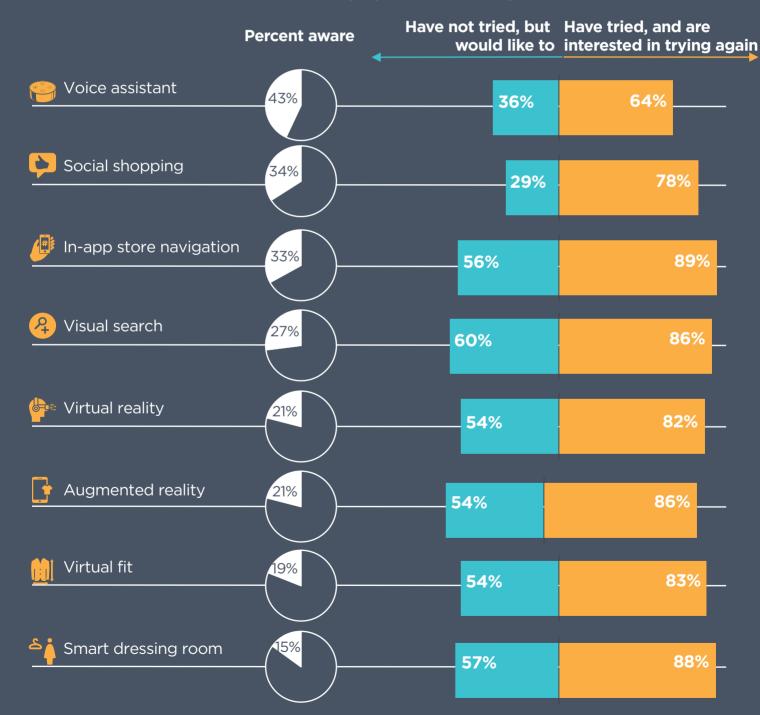
- Very interested in these technology or solutions
- Very important that brands or retailers have these technologies and innovations



Today's emerging retail solutions are targeting these early consumer pain points.

While new technologies are still at the cusp of consumer awareness and adoption, there are early indicators of what is capturing shoppers' attention. For example, a third of consumers have heard of in-app store navigation tools like planograms. More importantly, the vast majority of those who have firsthand experience using this type of tech while shopping want to try it again.

Consumer awareness and interest in emerging retail technologies:





ABOUT THE CONSUMER VIEW

The Consumer View is a quarterly study that tracks consumer behavior and shopping trends across stores, online channels, loyalty and technology. The 2019 Summer Consumer View, powered by Toluna Analytics, was conducted among 2,926 U.S. adults (aged 18+) April 24 — May 17, 2019. The consumer poll has a margin of error of plus or minus 2 percentage points. For more information, visit: nrf.com/consumerview.

ABOUT NRF

The National Retail Federation, the world's largest retail trade association, passionately advocates for the people, brands, policies and ideas that help retail thrive. From its headquarters in Washington, D.C., NRF empowers the industry that powers the economy. Retail is the nation's largest private-sector employer, contributing \$2.6 trillion to annual GDP and supporting one in four U.S. jobs — 42 million working Americans. For over a century, NRF has been a voice for every retailer and every retail job, educating, inspiring and communicating the powerful impact retail has on local communities and global economies.