

Improving eCommerce site search:

How new technology can help meet
customer expectations and grow sales



The emergence of eCommerce transformed the way consumers shop and created a major new channel for the retail industry. Since 2000, 75 percent of all retail sales growth has come from the online channel¹, and the trend of eCommerce taking share from brick-and-mortar retail shows no signs of reversing.

Rapid evolution of eCommerce technology — first on computers and now on mobile devices — has shifted consumer behavior and expectations. While some shoppers remain content to browse through merchandise on their computers or mobile devices, many others rely on technology to provide a more immediate shopping experience: They know what they're looking for, and want a quick and easy way to research their options and make a purchase.

Years of searching the web with powerful tools like Google™ have helped create this expectation. But delivering a satisfying online shopping experience falls to a retailer's site search technology — which in many cases doesn't meet consumers' needs. A search for something as basic as "black shorts" might return hundreds of items, including shorts of every color, along with unrelated products like short-sleeved shirts. At the other extreme, some searches might return nothing at all: A study by the eCommerce usability research center Baymard Institute found that 70 percent of the top 50 retail websites failed to return relevant search results for product synonyms. A search for "blow dryer," for example, would not bring up hair dryers, but instead would return no results.²

Failing to meet shoppers' needs in this way is especially damaging, because visitors who use the search box can be a retailer's most valuable customers: They tend to spend more time on a site and purchase more. By contrast, working diligently to enable strong search capabilities can be a springboard to higher growth. "Cracking the nut of online sales growth is all about improving the experience customers have on a website — and that experience starts with search," says Raoul Aranha, product vice president, Bank of America Merchant Services.

That's why retailers need site search technology that's powerful enough to interpret visitors' needs and deliver relevant results, while being flexible enough to let retailers adjust to changing market trends. These capabilities transform search from a basic website function to a strategic merchandizing and marketing tool.

Fortunately, the emergence of cloud-based eCommerce search engines that can be added to websites and apps via an application programming interface (API) has made sophisticated search capabilities available to retailers of all sizes. These tools are quick to implement and easy to customize and update, helping retailers capture unique merchandizing opportunities and keep up with developments in search technology. Best of all, they help merchants create a seamless, satisfying online customer experience from initial search to checkout — which can help increase visitors' time spent on site, basket size and conversion rates.

Adapting to these trends and capitalizing on the power of search are central to eCommerce success. This perspective from Bank of America Merchant Services describes how the evolution of search has shaped consumer demands, pinpoints where eCommerce sites typically fall behind and explains how technology can help overcome those challenges.



High consumer expectations: the Google™ effect

A visitor who goes directly to an eCommerce site's search box is showing a clear intent to buy: They have a need, and they're looking for a product to fill that need. In fact, shoppers who use site search convert to sales at twice the rate of visitors who don't use search, according to a 2016 report from the digital marketing strategy firm SmartInsights.³

To capture those potential sales, though, a site's search engine must direct shoppers quickly to the products they're looking for. Shoppers are anticipating an experience similar to their searches on Google, the gold standard for search functionality. What makes Google so effective, according to a 2015 Forrester Research report called "Google-ize Your Site Search," is its ability to return results that are **contextual**, **predictive**, and, most important, **relevant**.

Contextual results take into account factors that help uncover a searcher's intent — such as the visitor's site click path, geographic location and type of device. For example, searching for "shovel" in New England during December is likely to return results for snow shovels. But searching for "shovel" in the San Francisco Bay area in March is likely to return results for garden spades.

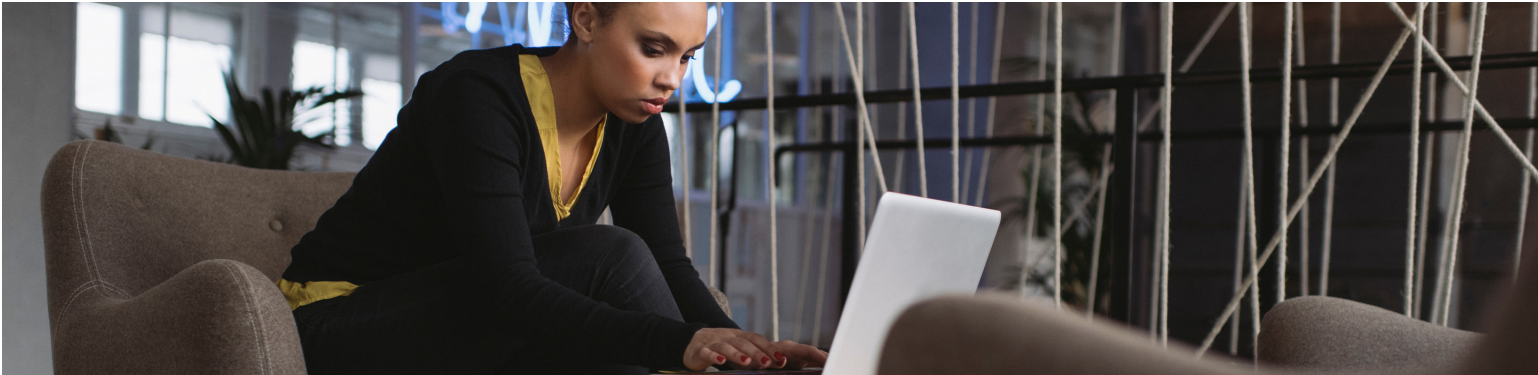
Predictive technology relies on Google's vast database of past searches to automatically suggest potential search phrases as soon as a visitor has typed in a few characters or words. For example, typing "graduation" on Google in June might suggest options such as "graduation gift" or "graduation presents," because millions of other users have been typing those phrases.

Relevant results go beyond simply matching key words. Instead, Google considers factors such as word placement within pages, so that a search for "black shorts" would return pages that have black shorts prominently at the top.

How well a site's search lives up to these standards can mean the difference between greater conversion rates and basket size and a missed opportunity. An estimated 90 percent of customers don't look past the first page of search results, according to "Google-ize Your Site Search."⁴ And if those customers don't see what they're looking for immediately they are likely to shop elsewhere. The potential damage extends beyond one lost sale, as Forrester's report also notes that 68 percent of shoppers won't return to a site that doesn't provide a good customer experience.⁵

"A lot of what keeps customers loyal is getting them information that they need when they need it, no matter where they are in the decision process," says Barbara Kahn, a professor of marketing and director of the Jay H. Baker Retailing Center at The Wharton School at the University of Pennsylvania. "When a customer is online and you can't give them the information they want, all they have to do is swipe the screen and they've taken their business elsewhere."

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How retail site search typically falls short

Compared to Google's quality search experience, eCommerce site search results often underwhelm or frustrate visitors due to their lack of relevancy. These problems stem from the fact that many site search engines don't recognize and adapt to shoppers' intent. To do so, the search engines must understand the language that shoppers typically use for their queries.

For example, Baymard Institute's 2015 study of the top 50 eCommerce sites found that 34 percent don't return useful results when users search for a model number or misspell just a single character in the product title.⁶ The retailer loses easy potential sales because of their site's unsophisticated search engine.

Likewise, site searches often can't support colloquial or thematic search queries — the kind that consumers often rely on because they don't know the official names for items or product categories. Baymard's study found that 30 percent of those same 50 eCommerce sites that couldn't match misspelled products names also didn't support queries of themes such as "spring jacket" or "office chair."⁷

The primary reason for eCommerce sites' language restrictions and inability to understand contextual clues to deliver more relevant results? "The technology most eCommerce sites are using for search is too old to support the expectations of today's consumer," says Michael Roberts, chief marketing officer, Bank of America Merchant Services. "Fortunately, with the right solution, retailers can readily solve their search capability limitations and put themselves in position to capture more sales."



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Site search technology: an evolution

Many of today's site search limitations are remnants of the early days of search technology. Site search evolved from database search technology, which typically required users to construct formal queries such as "black AND dress" to retrieve information.

The development of natural language search and basic pattern-matching allowed for new search tools that could find phrases like "cocktail dress" on a webpage. But these systems lacked the ability to interpret user intent: If "cocktail dress" wasn't in the description of a short black dress, then that item wouldn't be found.

Site search technology has continued to evolve to address many of these limitations. Often, though, these solutions reveal new challenges for retailers. For example, faceted navigation search lets shoppers refine their own searches and filter results, such as narrowing a search for flat-screen televisions by selecting from a list of brands and specifying screen size. However, these systems push the work of finding relevant results onto the user, which can detract from a seamless online shopping experience.

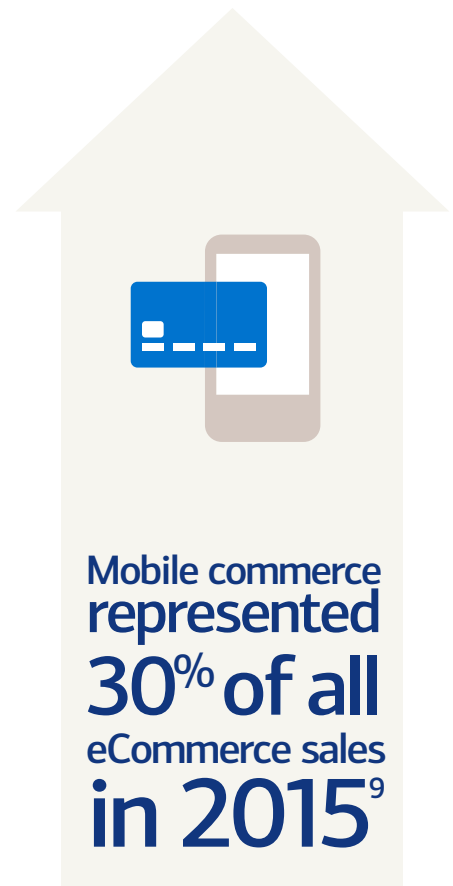
The development of dynamic merchandising or "searchandising" tools provided another step forward for eCommerce search engines. These systems let retailers curate search results based on visitors' actions and history, as well as important business metrics like inventory rates, product freshness or conversion rates.

That way, a site can deliver more personalized results for repeat shoppers, or allow merchandisers to promote higher-profit items at the top of search results. However, these tools require merchandisers to set rules manually about which items to promote for a given search term. That limitation matters because up to 20 percent of all searches are made up of new phrases, meaning it's impossible for retailers to curate every possible search.

Because of these complexities, some retailers have turned to free, open source search software that allows companies to build their own site search engines. Developing custom solutions allows retailers to combine the features they need to create their preferred customer experience — such as supporting contextual search analysis or recognition of synonyms and misspellings, along with searchandising capabilities. Walmart, for example, built its own search engine for Walmart.com, and has a dedicated technology department to support it.⁸ But this approach requires retailers to have the financial and technical resources necessary for a major development project.

Today, the rapid rise of mobile use by consumers is creating additional challenges for retail site search. In 2015, mobile commerce represented 30 percent of all eCommerce sales, and those figures are expected to grow three times faster than total Internet sales, according to a report from **Internet Retailer** magazine.⁹ Yet many retailers don't have a mobile version of their site optimized for shopping on small-screen, lower bandwidth devices.

Even retailers that have mobile eCommerce sites may not be meeting customer expectations. Baymard Institute conducted a 2015 study of the top 50 mobile eCommerce sites and found that the majority received a "poor" rating from customers who tested their search functions — even though search, not browsing, is the preferred method for finding products on mobile devices.¹⁰



The widespread use of mobile devices also has transformed search from strictly an eCommerce function to a critical piece of the omnichannel retail experience. Shoppers might be searching from their laptops at home, or they could be standing in a retail store using mobile search to check prices and availability. An eCommerce search engine must work seamlessly across technology platforms and in retail channels, so that users experience the same level of quality and convenience across every type of search they're performing.

"Consumers expect to interface with a company however they want to, whether via their phone, online or in store," says Kahn.

Looking for answers in the cloud

Retailers have a new option to help meet the challenges of eCommerce site search: cloud-based search software. These specially designed retail search engines meet the needs of today's marketplace by providing the search experience that consumers have come to expect.

Cloud-based search providers can offer built-in contextual analysis, such as recognition of users' location and other details, to help provide more relevant results and adjust for seasonality. These search engines also can support thematic queries, product synonyms and even differences in dialect, such as disparate terms for the same product in U.K. vs. U.S. English. For example, if you're in the U.K. and search a retailer's website for "pants," you'll get underwear. To find long pants you need to search for "trousers."

"Even when countries share the same language, there are a lot of differences in the way people speak from one location to the other. These local nuances often show up in common retail search terms," says Michael Reed, managing director, Europe, BofA Merrill Lynch Merchant Services. "Many U.S.-based retailers are looking to expand business to the U.K. and Europe, and they'll need tools that provide this language transition and translations between cultures."

Retail websites also can benefit from cloud-based search engines that offer machine learning — technology that observes what visitors are searching for, clicking on and buying to recognize patterns and dynamically adjust search results. Here's a simple example: If the search engine notices a particular type of camera rising in popularity, it can automatically place that item at the top of search results for "camera."

Alongside machine learning, cloud-based systems offer simple interfaces that put control of the search results in the hands of merchandisers, allowing them to configure results to support their sales strategies. For instance, merchandisers can easily change the products that are featured alongside others to optimize cross-selling and upselling opportunities.

Even better, cloud technology means eCommerce sites can adopt these powerful capabilities without having to build and maintain their own search engines. Instead, both the search application and the servers to run it are hosted through the internet, and connect easily with a retailer's website through an API. These systems also can connect to both websites and mobile apps — ensuring consumers get a seamless, quality experience whether searching on a mobile device or a computer.

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This approach provides dynamic, relevant search without requiring a large IT department or a long development and implementation process. It also allows for continual updates that are automatically delivered to a retailer's site and mobile apps, so eCommerce sites stay ahead of technological changes and customer needs.

The future of eCommerce: keeping up with how shoppers use search

The pace of change in search technology continues to accelerate, leading to even higher expectations among shoppers.

Voice-activated search is one emerging technology reshaping how consumers interact with their devices and websites. Apple's Siri, Microsoft's Cortana, Amazon's Echo and Google's Voice Search are teaching people to speak to their computers and phones when they're looking for something, rather than typing in a query. As a result, voice searches on Google are 35 times higher today than they were in 2008, according to the 2016 "Internet Trends" report from venture capital firm Kleiner Perkins Caufield & Byers (KPCB). KPCB also estimates that 50 percent of all searches will be voice searches by 2020.¹¹

Whether searches are typed or spoken, another emerging trend is the shift toward semantic search. This technology can process the meaning of common phrases, rather than simply matching the words in that phrase to words on a website. Semantic search would allow shoppers to type or say a phrase like, "Find me the cheapest jacket on sale" and receive relevant results.

As shoppers grow accustomed to new options like these, retailers will need to continually update their site search technology to meet the market's expectations. Otherwise, they risk declining sales in the retail channel that's expected to remain the key driver of industry growth for the future.



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SEO and on-site search: What's the difference?

Some retailers might think that search engine optimization (SEO) is the only search-related marketing effort they need. But optimizing for web search and site search are different challenges.

SEO

SEO aims to boost traffic to a site by improving the chances that consumers find your pages when they type specific phrases into a search engine like Google.

- SEO tactics include using targeted keywords in website page content, as well as in title tags and meta data descriptions built into the website design.
- Good SEO practices will boost a site's chances of being found through Google or Yahoo, but ultimately retailers cannot control exactly how they are found or shown to consumers.

On-site search

On-site search is how consumers find a product once they get to a retailer's site. Improving site search can lead to more time spent on sites, larger basket size, higher conversion rates and higher customer satisfaction (for more repeat visitors).

- Optimizing SEO gets consumers to a site; optimizing site search converts shoppers to buyers. With dynamic on-site search, for example, retailers can configure results from a search for a "white v-neck t-shirt" to automatically display related casual clothing, such as jeans and sandals, for cross-selling opportunities.
- Retailers have complete control over how search is implemented and how results appear when a consumer clicks on search.

By contrast, merchants that understand how search helps them effectively merchandise their products and provide exceptional customer service can dominate the increasingly important digital channel. That's why retailers must think of search as not just a technology issue — better left to the IT department to worry about — but as a critical sales and marketing tool for eCommerce growth.

"Customers' expectations are soaring and they're looking for a seamless, positive experience across multiple purchase channels," says Michael Roberts. "To help meet those expectations, businesses have no choice but to integrate best-of-breed technologies to support one of the highest intent-to-buy activities on a website: use of the search box."

A world leader in the payments industry

Bank of America Merchant Services connects businesses and consumers by doing payments better. In an increasingly complex marketplace, we help empower businesses to give consumers the right commerce experience. We consult with you to customize solutions that integrate selling channels, open new markets, help solve problems using data, stay secure and, ultimately, accomplish more.

Contact us

For more information on how Bank of America Merchant Services can help you optimize your business and customer experience through eCommerce site search, call your Bank of America Merchant Services business consultant or 855.833.3614. We are here to help.

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¹ PwC's Strategy&, 2015 Retail Trends <http://www.strategyand.pwc.com/perspectives/2015-retail-trends>.

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⁵ Forrester "Google-ize Your Site Search," October 2015

⁶ Baymard Institute, "ECommerce Search Usability: Report and Benchmark," 2014. <http://baymard.com/blog/eCommerce-search-report-and-benchmark>

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