

# Site Search: The New, Powerful Merchandising Tool

*The evolution of site search from a navigation tool to a merchandising tool is driving retailers to implement the technology in ways never imagined.*

**A**s site search continues to evolve into a more sophisticated merchandising tool, retailers are recognizing greater uses for the data that powers their site search engine. The end game is to create a more enriching shopping experience that delivers a higher level of customer service, and subsequently boosts conversion rates and customer loyalty.

Not only are the latest generation of site search applications more intuitive when it comes to answering a customer's inquiry, they also are user-friendly applications that deliver real-time information. Plus, they can be easily integrated across the entire enterprise to enhance such areas as customer service and the call center.

## **The payoff**

The payoff for retailers is the opportunity to reduce the reliance of marketing and merchandising departments on IT to implement new and creative uses for site search in an expedient manner. "Site search is a work flow tool that empowers the end user to create a more intuitive marketing and merchandising strategy," says Stephen Baker, vice president, eBusiness for Fast Search and Transfer. "By expanding the ecosystem of information that makes up the site search database to enhance the shopping experience, retailers can differentiate their business."

By pulling data from CRM applications, customer e-mail, Google, and web analytics, then linking it to their site search databases and placing it into the context of the customer inquiry, retailers are creating

a more powerful marketing tool capable of boosting conversion rates by about 20% on average, and by more than 50% in some cases. "There is a lot of data that is part of the customer relationship building experience, such as product reviews and owners manuals, that can be integrated into the site search results to create a richer shopping experience the retailer can leverage as a point of differentiation," explains Andy Wolf, industry manager, retail, for Endeca Technologies Inc.

Delivering a richer level of data creates a more intuitive search result that can create cross-sell and upsell opportunities for the retailer. "To grow, retailers need the means to sell customers more than for what and why they came to the site," says Mercado Software Inc. CEO Corey Leibow. "Site search is a way to deliver information about related, higher margin products and get customers the information they need to make the purchasing decision in as few clicks as possible."

Anecdotal evidence indicates that if consumers do not receive the site search results they desire

**'It's more useful to provide a choice of categories, instead of just one list of results.'**

**Doran Howitt, vice president, marketing, Thunderstone Software**

within three clicks, 30% will abandon the site with each successive click. In comparison, retailers that can convert a sale in one or two clicks after a site search query can enjoy an increase in sales revenues of about 20%.

## 'Poor results may indicate a need to add products based on keywords that are entered.'

Shaun Ryan, CEO, SLI Systems

"It's about delivering more sophisticated results that are put in context, not just a list of results," says Doran Howitt, vice president of marketing for Thunderstone Software.

Thunderstone builds the spelling checker or "did you mean" function for a site search out of the actual words indexed on that site. These may include trademarks and the retailer's own terms that don't appear in a normal dictionary.

### Real-time tracking

Part of the sophisticated thinking process behind the new breed of site search applications is real-time tracking. Increasingly, multi-channel retailers need to stay abreast of inventory in all channels, price changes, and pricing for corporate or preferred customers. "Search results tied to availability of the product and current price optimizes the site search engine by helping customers zero in on what they are looking for faster, and creates a positive shopping experience," says Shaun Ryan, CEO of SLI Systems. "A positive experience gives customers a compelling reason to return to the site."

There is no such thing as too much data, or data too ambiguous, when it comes to site search optimization. "It's less about an elegant algorithm and more about delivering the right results," says Tony Frazier, program director, content discovery marketing for IBM Corp. "Putting the search query into context before returning the answer allows merchandisers to configure the weight of the query to drive a more personalized experience and create sophisticated merchandising scenarios."

In giving the merchandising department more control over site search, retailers gain flexibility over how best to interact with the customer to complete the sale, while maximizing use of the web site and their stores. "Retailers that can track

whether a customer makes a site search query from home, office or a mobile device and the time and day the query is made can use that information to create customized

results that mean something," says Fast Search and Transfer's Baker.

### Weaving information

For example, when a customer logs on to a retail site from a location other than his usual location (say, from office rather than home) and searches for an item that is out of stock on the web, the retailer should be able to direct the shopper to a store with the item closest to the current location rather than closest to the location from which the shopper usually visits the site. Web operations need the ability to know from where a customer is shopping as well as the ability to know which stores have what in stock. Retailers can then further sweeten the deal by offering an incentive, such as a discount or free gift, to purchase the item at the designated store. "The more retailers weave information about the customer query and how customers interface with their site search, the better the chance of returning a result that aligns with the customer's shopping objectives at that particular time," adds Baker. "Putting more intelligence into search to anticipate the needs of the customer boosts the ROI on the application."

Part of the intelligence is to recognize the device customers are using to access the web site. This is increasingly critical as the Blackberry and web-enabled cell phones gain market share. While these devices make it possible for consumers to shop anywhere, they are limited in screen size, not to mention the time they may require to scroll through a large block of search results. "Sometimes it is better to take the customer directly to a landing page or show the top three results for a couple of categories so they can choose how to deepen the search," says Endeca's Wolf. "This gives merchandising more control over the user experience by servicing customers in specific ways."

Endeca has created customized landing and guided search pages based on site search queries for such clients as Patagonia.com, NorthernTool.com, and CircuitCity.com. It also created the so-called store within a store for eBags.com, in which consumers can search by brand name.

### Creating rules through testing

Determining what works and doesn't is a matter of A/B testing. With enough testing, business rules can be put in place against customer profiles, search terms, merchandise categories, or any combination of those, according to Wolf.

The advantage of A/B testing of site search results and related landing pages is that the results empower merchandising executives to be more active in designing site search results. "A/B testing is a way to control the customer experience and to tweak it accordingly," adds Wolf. "The more retailers can leverage that control, the more likely they are to create a point of differentiation with the customer and become the first place the customer stops to shop."

Using test results to create dynamic landing pages or site search results makes it possible to quickly test merchandising strategies built around keywords or categories. At some point, most keywords and category searches lose their relevance as new phrases and keywords enter the site search lexicon, according to Bryan Surles, director for technical field operations for Mercado. "Tracking the amount of traffic associated with each keyword or category helps merchandisers determine the cost effectiveness of the word as it relates to the merchandising strategy," he says. "Some clients manage more than a million keywords. Having insights into the traffic associated with those words can help retailers to create dynamic merchandising strategies around them and the points of entry to the site they open up."

Mercado has developed a user console within its site search application that automatically suggests

ways to optimize merchandising strategies around site search. The console, which was created with input from long-standing users, will generate an alert suggesting a synonym be created for a product that cannot be located based on customer queries. In most cases, the product that can't be located is not cataloged under the term consumers are using to search for it.

### Quick fix

Mercado corrected such a problem for OfficeMax.com when consumers looking for correction fluid repeatedly entered "Liquid Paper." "The product cataloged was White Out, and entering 'Liquid Paper' was not recognized," recalls Surles. "It was a simple fix and executed quickly because management was alerted to the problem."

Identifying and correcting such problems also makes it more feasible for retailers to identify new keywords to which they can attach promotional content or other information that can build and deepen the customer relationships. "It is about leveraging the expertise of e-commerce managers to make it easier for them to fix, fine tune or tweak their site," adds Mercado's Leibow.

Retailers that take the time to think through the depth of their search and how best to display

## 'Putting more intelligence into search to anticipate the needs of the customer boosts the ROI on the application.'

**Stephen Baker, vice president, eBusiness, Fast Search and Transfer**

the results to the customer are more apt to deliver a wealth of information that can close sales and lead to upsell and cross-sell opportunities without overwhelming the customers, according to Thunderstone's Howitt.

"As consumers crave more information on a product, you gain their trust by letting them search the product manuals or reviews, in addition to the catalog," he says. "But if you're going to do that,

then organize the results too. It's more useful to provide a choice of categories, instead of just one list of results."

To illustrate his point, Howitt uses the example of a customer searching for slip-on shoes. Naturally, the search engine has no way of knowing whether the customer is looking for men's or women's shoes.

The solution is conducting a search using combined structured and unstructured logic. In this case, the phrase "slip-ons" is searched within the full text of the site, but separating the results into men's and women's shoes requires using the category structure inherent in the product database, which directs shoppers to the right product.

"It's also important to do that efficiently, because it's more computing-intensive," says

## 'There is a lot of data that is part of the customer relationship building experience.'

Andy Wolf, industry manager, retail, Endeca Technologies

Howitt. "Providing such sophisticated functionality is one of Thunderstone's specialties, and we have optimized our tools to perform such complex business logic quickly."

### Parsing the data

Parsing data so effectively requires a flexible application that can be easily integrated into the retailer's operating platform so that data can flow between disparate sources and be stored in a common database. "It is important to generate reports on the data flowing into the site search catalog and how it is being used for retailers to know where the holes are in their knowledge base," says SLI Systems' Ryan, who holds a PhD in neural networks. "It is not uncommon for knowledge holes to lead to poor customer experiences."

SLI Systems' search application, which is a hosted ASP solution used by more than 100 web sites, learns as customers enter product or catalog

queries. The more frequently a keyword is entered, the faster the application learns what results lead customers to close sales, upgrade their purchase, and buy related items. The information can even be used to enhance results on search engine sites to boost natural search results or increase sales from paid search.

"We've created related search pages for clients that Google can pick up and that lead the customer to where they need to go on the retailer's site," says Ryan. "We can also help determine keywords for paid search."

### The frequency rule

Another way to close site search data holes is to measure how often an action is taken by a customer in relation to the business rule put in place on the site search engine for a particular query.

"Demonstrating how frequently business rules are executed allows retailers to identify what behavior led to the rule being executed

or not," explains IBM's Frazier. "Automatically updating content in site search based on this information cuts down latency in modifying the site search catalog."

IBM's site search engine looks for clues within the site search queries and customer demographics to spot data holes. If a retailer's customer base is skewed toward women, but still attracts male shoppers, IBM's site search engine, which is built on the platform used by site search provider iPhrase, will weigh results for men's version of apparel, for instance, based on the percentage breakdown. IBM, which lists Neiman Marcus, Staples and Restoration Hardware as customers, acquired iPhrase last year.

IBM's site search engine also makes it possible for retailers to segment the information returned from a site search based on customer loyalty. Retailers can segment customers into tiers based on revenues generated, such as gold, silver, and

bronze, and tailor special offers and information contained within the search results based on the attributes of those customer segments.

## Segmented results

"Retailers want to group items based on customer segments, not necessarily speed and feed," says IBM's Frazier. "It is important to work closely with a retailer's e-commerce team so that the data model is reflected in the site search experience."

Doing so plays especially well with corporate clients, which are always looking to leverage their buying power. "Site search needs to be able to consult the rules around each product query and the customer base to deliver a relevant, personalized result," continues Frazier. "Knowing what a customer buys, how often, and in what quantities boosts the relevance of the search results. Search is no longer a black box algorithm that is difficult to change."

Such intuitiveness creates a 360-degree view of the information in the retailer's database, which

## 'Site search is a way to deliver information about related, higher margin products and get customers the information they need.'

Corey Leibow, CEO, Mercado Software

can then present the customer with a multi-channel view of the products for which they are searching. Fast Search and Transfer allows retailers to cross check site search queries across the supply chain to identify product gluts. Once identified, retailers can offer customers incentives to purchase these items at a discounted price as part of the site search, even if it means heading to a local store to do so. The concept is especially useful for excess inventory of higher ticket items. By enacting such a strategy, retailers can boost margins and the number of units per sale, as well as conversion rates.

When customers shop a web site without using search, conversion rates average between 3% and 4%, compared to 12% for those that use site search, according to Fast Search and Transfer's Baker. Much

of the increase is attributable to the information customers receive about a product or category. "Why serve up just any product if site search can help clear inventory or boost margins, especially when Internet retailing is getting so competitive?" he asks.

## Empowering the call center

The intuitiveness that the new breed of site search applications brings to multi-channel retailing is not being limited to a retailer's web site. Increasingly, retailers are applying site search capabilities to call centers to further empower service representatives.

Endeca has extended its site search capabilities to several retail clients. Service representatives can enter keywords or terms based on their conversation with the customers and pull up information that can guide the customer through the web site to the product or information they seek. "It's a better use of the data and execution of the retailer's merchandising strategy by extending personalization into another department," says Endeca's Wolf, who adds 1-800-Flowers.com has adopted the concept.

While some users get intimidated at the thought of creating custom search results that can be applied to call centers as well as

the web site, Endeca plans to begin creating business rules that deliver customized user experiences based on the keywords entered, how the customer came to a specific department, and their user profile. "It is the way to go when creating a segmented merchandising strategy," adds Wolf.

IBM is also making its site search technology available to call centers as a way to increase the velocity with which merchandising can influence the online shopping experience without having to rely on intervention from the IT department. Staples and Radio Shack, for example, have applied the technology to its customer service center to help customers find specific promotions online faster.

"Now customers are using the call center to tap knowledge across the enterprise," says IBM's

Frazier. "Consumers like to push the browsing experience to other areas of the retailer's business, which is why we do a lot of integration to the user's CRM application."

### **Empowering the store**

Another potential use for site search is to make it available in stores. Mercado's Surles envisions a day when retailers will place kiosks throughout their stores where customers can perform site search before shopping. The experience would be the same as on the web site, that is, delivering relevant products and related information, as well as where the item can be found in the store.

Customers can also consult the kiosk to locate out of stock items on the web site or in another store. "The key to successful site search across a retailer's entire business is using it to keep

sales rising quarterly without incurring high costs or expending a lot of resources," says Surles.

Despite the advances in site search, vendors caution that it is not a panacea for fixing ailing sales. While software vendors can improve performance, it is still up to the retailer to use sound logic when crafting the business rules that dictate site search behavior and how it meshes with their merchandising strategy, according to Thunderstone's Howitt.

Thunderstone's engine supports the SQL programming language for customizing site search because it is well known by e-commerce application developers, and lends itself well to incorporating structured logic with search results.

"Generic rules are not necessarily going to deliver the desired results because every retailer has different needs," stresses Howitt. "As a vendor we can do some behind-the-scenes work, such as adjusting keywords as they are entered to improve the results. But the logic for when a specific business rule is used has to be well thought-out."

Retailers must also closely monitor performance reports so they understand the connection between keywords and search results across the entire enterprise, not just the web site.

"Poor results may indicate a need to add products based on the keywords that are entered but which deliver no results," says SLI Systems' Ryan. "Breaking out the information contained in a performance report and tailoring the fixes to specific areas of content with site search are extremely helpful, especially for larger retailers."

### **Ideas from customers**

Retailers can even pick up ideas from customers on how to improve their merchandising strategy and that can lead to incremental sales based on keywords entered, he adds.

## **'Knowing what a customer buys, how often, and in what quantities boosts the relevance of the search results.'**

**Tony Frazier, program director, content discovery marketing, IBM**

Still, retailers must be cognizant that they cannot manually control every search query, i.e. feeding information to customers on a per instance basis, as opposed to using a business rule, as they do not have the resources to do so for the millions of ever evolving keywords that comprise their search catalog.

"You can only control results for a limited portion of queries," Ryan says. "It is all right to manually control the results for the most popular terms, but there are just too many queries to manage in this fashion. Search is only one element of a merchandising strategy."

While that may be true, there is no denying that search is becoming an increasingly larger component of retailers' merchandising strategies as they seek new ways to push products and information to customers that can close or expand a sale.

As a result, site search is no longer a passive navigation tool, but rather a proactive tool that can provide retailers with insights into customer behavior and make suggestions on how best to capitalize on that behavior across all retail channels. Given the constant evolution of site search, it is safe to say that retailers have only begun to scratch the surface of this powerful merchandising tool. ■