



## Site Search and the Mobile Experience

A Guide for Providing Mobile and Tablet Shoppers with an Amazing User Experience

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# Introduction

Just as online shopping lured consumers away from brick-and-mortar stores, the mobile revolution attracts shoppers to the convenience of buying products via their smartphones and tablets. The challenge is to make mobile shopping fast and convenient, even with the limitations of smaller screens and limited typing functionality. Given these physical constraints, site search can be the most critical aspect of delivering a satisfying shopping experience to your mobile users.

## The Mobile E-commerce Market

With more than 2 billion people worldwide expected to own a smartphone<sup>1</sup> and 1 billion expected to use a tablet<sup>2</sup> in 2015, online shopping is now a mobile sport. In fact, more than half of all time spent shopping online is done via smartphones and tablets, propelling mobile commerce to grow three times faster than overall e-commerce. A look at recent statistics on mobile device use reveals exponential growth, as well as a rise in mobile e-commerce sales. ComScore reports that smartphones account for 44% of retail Internet minutes while tablets account for 11%, meaning 55% of time spent shopping online is done from a handheld device. The remaining 45% of shopping minutes were spent on desktops and laptops.<sup>3</sup>

More than half of all time spent shopping online is done via smartphones and tablets

According to the “State of Retailing Online 2014” study conducted by Shop.org and Forrester Research, store-based retailers report an average 135% year-over-year growth in sales from smartphones and 86% growth from tablet users. The 2014 study found that one of the top objectives for retailers is “everything mobile.”<sup>4</sup>

And why wouldn't mobile success be at the top of every retailers list? Mobile commerce has continued to grow and now accounts for 11% of e-commerce sales,<sup>5</sup> but on peak shopping days that number skyrockets.

During the 2014 holiday season, SLI Systems found that 37% of Cyber Monday shopping in the U.S. was conducted on mobile devices, up from the 29% reported by Marketing Land in 2013.<sup>6</sup> Immediately following the Thanksgiving holiday weekend, The Washington Post declared mobile shopping “the big winner.”

“For years now, we've heard a steady drumbeat of forecasts suggesting that mobile devices are going to play an increasingly crucial role in every step of a shopping expedition, from browsing and couponing to purchasing.

And in the five-day shopping bonanza that stretched from Thanksgiving to Cyber Monday, there was ample evidence that this long-anticipated tipping point has arrived. For the first time ever, smartphones and tablets accounted for the majority of all online traffic on Thanksgiving Day, according to data analysis by IBM. On Black Friday, one in four online purchases were made on a mobile device.”

*Sarah Halzack – National Retail Reporter for The Washington Post<sup>7</sup>*

Ignoring the importance of mobile shoppers is not an option unless you are willing to risk losing your best customers. According to Limelight Networks, Inc., 80% of shoppers abandon a mobile site if they have a bad user experience.<sup>8</sup> With mobile, space and time are at a premium and returning relevant results through better site search is more important than ever.

# What Should Your Mobile Strategy Be?

With the exception of larger tablets, screens on mobile devices are just too small to access standard websites with an optimum user-friendly experience. It's too difficult for shoppers to find products when navigation and search boxes are not designed for the mobile environment. Some features, like hovering, don't translate to touch screens. That said, there are multiple ways to deliver a fast and efficient shopping experience to your mobile users – one that turns browsers into buyers.

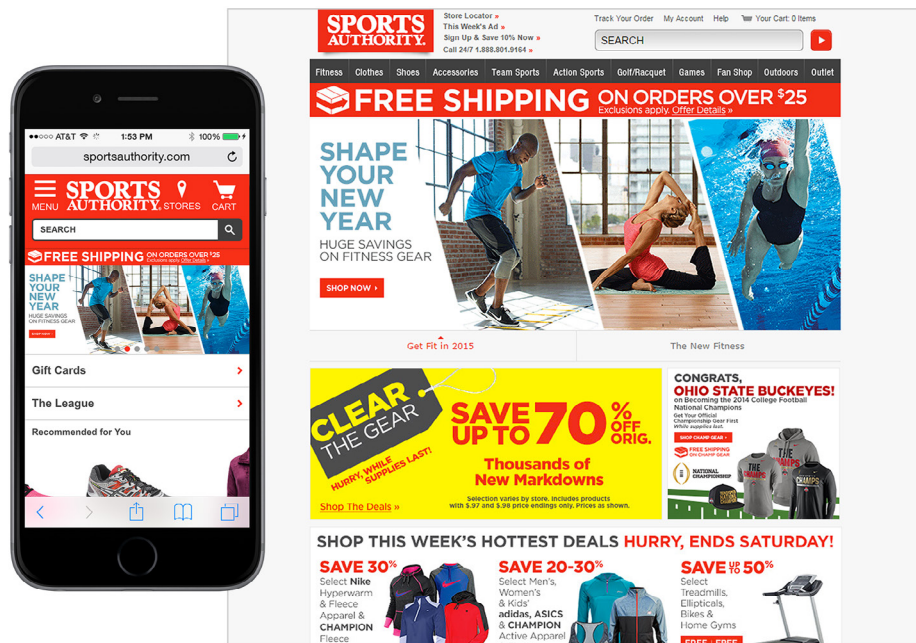
The first step in creating a mobile strategy is to decide whether you want to build a browser-based mobile site or an app-based mobile store – or both.

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## Mobile Sites

Browser-based mobile sites have a similar look to mobile apps but appear inside the browser of your handheld device. Navigation is enabled through easy-to-access buttons, the search box is highly visible and search results appear in a simple format so users can easily scroll up and down to find the right product. Search results should show product pictures along with essential information, such as price, discounts, ratings and short product descriptions.

When designing for the mobile web, there are two main options: responsive web design or a dedicated mobile website. Responsive web design is a method of building websites with a highly optimal viewing experience across a wide range of devices, from large desktop computer monitors to smaller tablets and smartphones. The “design once and use across multiple platforms” approach is becoming more and more common with website designers. However, responsive web design uses a lot of JavaScript to decide whether the viewer should see a page for a smartphone or a desktop computer, and takes extra care in avoiding running certain scripts, downloading certain images and loading certain CSS, which makes the page design inherently more complicated. In some cases, a dedicated website designed purely for smaller screen sizes makes a lot of sense, as it will be easier to design and will generally perform well without a lot of fine-tuning.



Sports Authority's website and mobile site both provide shoppers with easy-to-use search and navigation

## Mobile Apps

A mobile app interface is similar to a mobile site, but the graphics can be more sophisticated. The native apps are not accessed through a browser, but appear as icons on your handheld device. Most of these apps are free and easily downloadable from various app stores. Mobile apps provide a number of advantages. First of all, they provide a fast way for users to get directly to your products. Mobile apps can also enable customers to create “wish lists,” share recommendations with friends, track points earned in loyalty programs and find local stores with location finders, among other features. Mobile apps are especially appreciated by repeat shoppers – those who love your brand and want to access all the features and special perks you might offer.



### Speed Matters

Nearly half of consumers expect a web page to load in less than two seconds and 73% of mobile Internet users say they've encountered a site that was too slow to load, according to KISSmetrics.

However, two out of three customers prefer mobile websites over mobile apps.<sup>9</sup> Downloading an app to shop or complete a transaction is often considered an unnecessary barrier, and many customers would rather go directly to the store's website via their mobile browser, according to KISSmetrics.

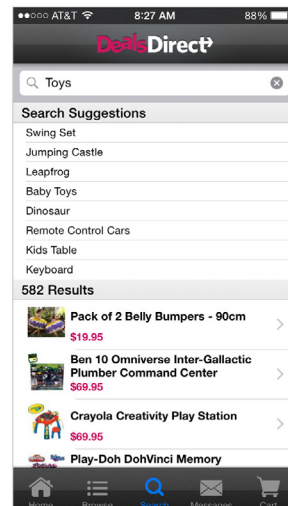
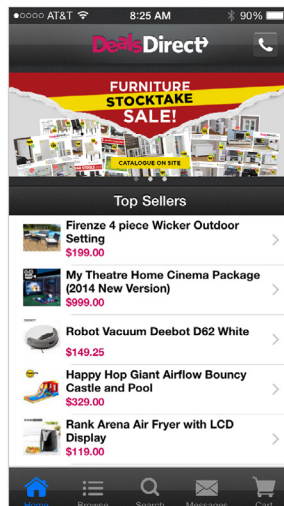
It is also worth considering that your app may get lost among all the other apps users have on their phones or tablets. Even worse, your app may get deleted because of a need to free up hard drive space.

Some retailers opt for both a mobile site and a mobile app. Since mobile apps take a bit longer to build, it can make sense to launch a browser-based mobile commerce site first and create a specific shopping app later. Other retailers decide to build a native app from the start. The route you take depends on how quickly you would like to have a site up and running, as well as your budget.



### Untapped Potential

Only 60% of the top 100 global retailers have a dedicated mobile site, while 32% still show mobile users a desktop version of their site, according to Business Insider.



Australia-based Deals Direct provides shoppers with a dedicated mobile app

## Mobile Users Embrace (Re)Search

Interestingly, people currently use mobile commerce sites more for research than for purchasing, according to Coda Research – although more and more shoppers are graduating to buying, particularly as more mobile sites are created to facilitate the purchasing process. Still, according to Coda, many mobile device users are conducting research and comparing products and prices while they stand in a store. A successful mobile site should significantly increase the conversion rate of that traffic and potentially accelerate growth.

## Mobile Site Search Tips and Tricks

Mobile site search is a vital part – some would even say the most important part – of the mobile experience. Limited screen real estate provides little room for navigating from page to page or product to product. Furthermore, slow page-loading times via mobile networks mean pages have to be simple and lightweight. Given the space and speed challenges of smartphones, a search box can be the best gateway to finding products and content on mobile sites and mobile apps.

Without fast and relevant site search, you will struggle to create an online shopping experience that encourages visitors to buy. Shoppers will also struggle to quickly find what they want on a mobile site that doesn't offer user-friendly searching capabilities, causing them to abandon their search and the potential purchase.

"Today's mobile users are highly search-dominant," writes usability expert Jakob Nielsen.<sup>10</sup> Nielsen lists four key challenges for mobile device web usability:

- Small screens, but also glare and bad lighting
- Awkward input, especially for typing and navigating
- Download delays – mobile device users sometimes have to wait longer for page reviews and search results
- Poorly designed sites – websites that are created for desktop usability don't meet the needs of the mobile user

With these mobile device limitations in mind, here are a few recommendations for ensuring the site search and navigation features of your mobile site are as agile and effective as they should be.

### Relevance

If they can't find it, they can't buy it. The most important feature, whether building site search for a standard site, a mobile site or an app, is relevance. If you provide relevant and fast search results, visitors will be more likely to find what they're looking for, and in turn, more likely to make a purchase.

### List Most Popular Items First

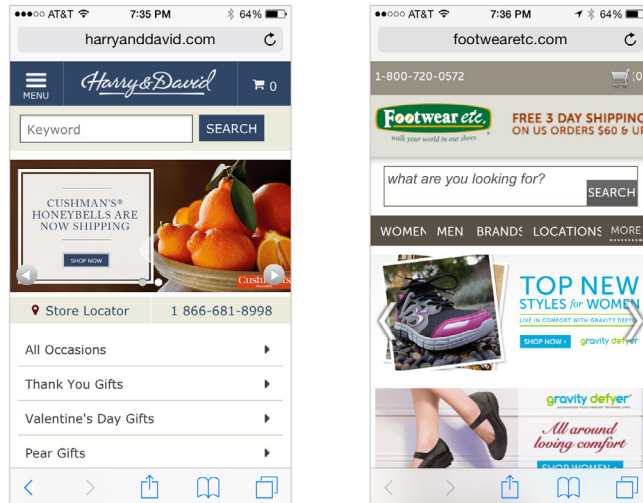
When customers conduct searches on mobile devices, chances are, they're looking for a product that other people have successfully searched for in the past. When you push the most popular results for a given search term to the top of the list, mobile device users can complete searches faster.

e.l.f. Cosmetics conversion rate is 4x higher on mobile for site search users vs. non-site search users

Read more:  
[www.sli-systems.com/elf](http://www.sli-systems.com/elf)

## Give the Search Box Prominent Placement on a Mobile Site

Whether you choose a browser-based or app-based mobile site, the search box should be even more prominent than the placement on your standard site. The top of the page is your best bet. For instance, on the Harry & David and Footwear etc. sites, the search box dominates the home page screen. This again is crucial. Search enables users to get to the products they are looking for faster and convert more quickly.

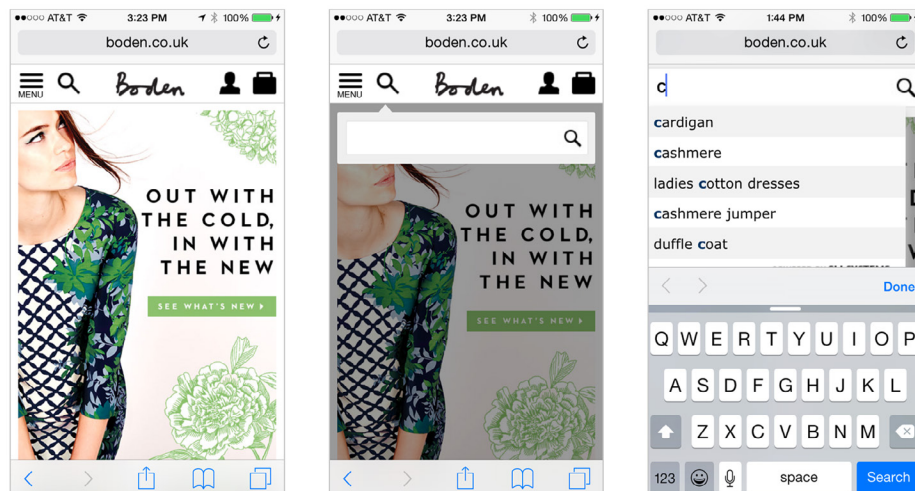


The search box is prominently placed on the Harry & David and Footwear etc. mobile sites

## Add Autocomplete to Mobile Search

With autocomplete, shoppers who start to enter a keyword term will see suggestions for relevant search results. This helps visitors formulate their queries and reduce spelling errors, speeding up the experience and leading them to the products they are looking for.

In the Boden example below, when users click on the search box, it is pushed right up to the top of the page to increase the amount of real estate available to show search suggestions. As users start typing in the search box, relevant search suggestions are automatically displayed. These suggestions are presented as a list and spaced out enough so users won't hit the wrong ones.



Boden uses autocomplete on its mobile site to help shoppers find products faster

## Make Links and Buttons Touch Friendly

When designing for touch-enabled devices, keep in mind the size of the human finger and thumb. The touch target for an index finger is 57 pixels and for a thumb it is 72 pixels. Making touch targets smaller than that can lead to user frustration and incorrect clicks. Moreover, don't require users to pinch and zoom in order to navigate pages as these actions also lead to a negative user experience.

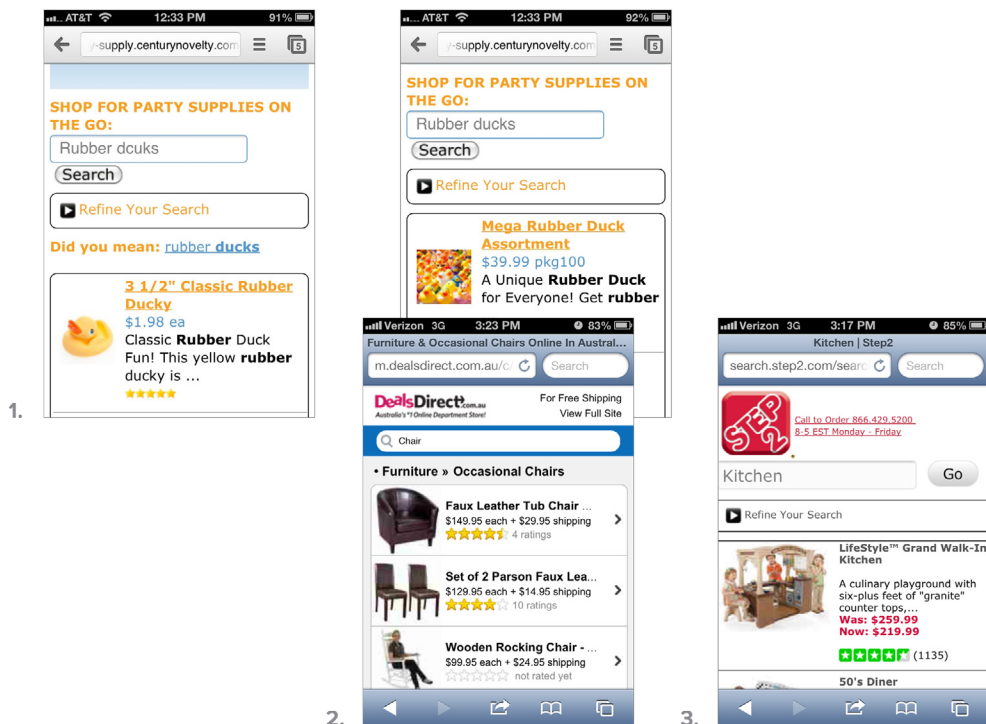
A very common mistake in mobile development is attempting to port desktop features directly to a mobile device. With a touch-enabled device, the user is not navigating the page with a mouse cursor so functions like hover don't translate into a positive customer experience. At best, the user will attempt to click the item multiple times to activate the link; at worst, the user will be unable to click through at all and may abandon the site in frustration.

## Account for Misspellings and Similar Words

Just as you should with your regular e-commerce site, avoid "no results" pages, and make sure your site search factors in typos – they'll be more common on mobile devices with small keypads or touchscreens. Accounting for synonyms is also a good idea, as it keeps visitors from having to reenter a new phrase. When an exact match isn't found, it helps to offer a link to results for similar keywords. Links to similar results help shoppers avoid having to type in additional search terms and speed the way toward a purchase.

## Keep the Content of Your Search Results Page Succinct

The mobile screen doesn't allow for lengthy product descriptions or the many site navigation links that you'd find on search results pages designed for a desktop user. Deals Direct presents the results in a single column while showing the product name and rating. Century Novelty adds a brief product description, while still keeping the information succinct, and Step 2 goes a bit further by adding discount information. The key is to distill the information down to the minimum required to help visitors quickly make a purchase decision, without over-cluttering the interface.



1. Century Novelty's succinct search results with added product description. 2. Deals Direct's search results page with thumbnail image, name, price and ratings. 3. Step2's search results with added discount information.



## Size Images for Speed

Nearly half of consumers expect a web page to load in less than two seconds and 73% of mobile Internet users say they've encountered a site that was too slow to load, according to KISSmetrics. There is a distinct difference between what a computer calculates as page weight/load time and what a user will consider the page speed. Enhancing web pages for "visually complete" – or the user's perception of when a page is complete – and improving actual page load times will create a better user experience.

Don't reuse desktop images for mobile sites as they will force users to download excessively large images. Even images hidden via CSS for a mobile view will still be downloaded. Images sized for smartphones and tablets will help keep pages lightweight and improve the mobile experience.

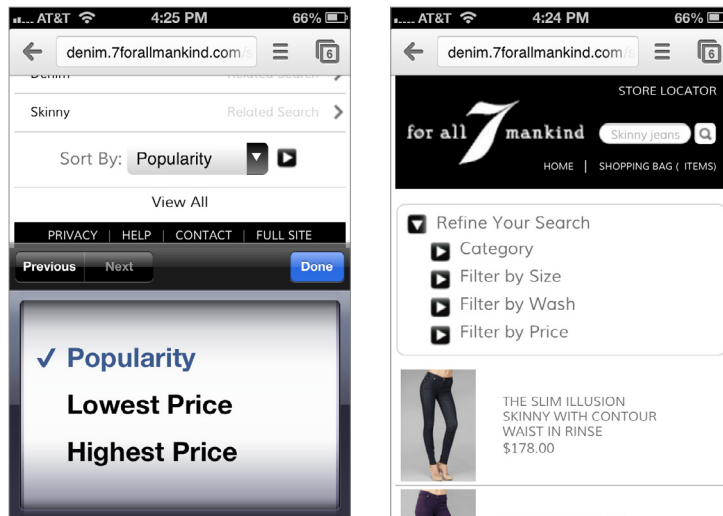
Special note: If your site is responsive, make use of client side conditional loading (imager.js) or dynamic image compression (e.g. Akamai's ION product line) to ensure users aren't downloading unneeded bytes. Web developer Tim Kadlec found that sites could save up to 72.2% of image weight by using a responsive image technique.<sup>11</sup>

## Offer Refinement Options

Refinements make navigation and searching easier for visitors. However, since mobile devices have a lot less space for navigation, using a drop-down menu can be a good design choice. Presenting refinements this way saves screen space by hiding them when they are not in use. This helps reduce visual clutter on the mobile site and allows visitors to view more products and content without needing to scroll down.

Learn more about reducing friction for mobile shoppers on our blog

[www.sli-systems.com/mobileshopping](http://www.sli-systems.com/mobileshopping)



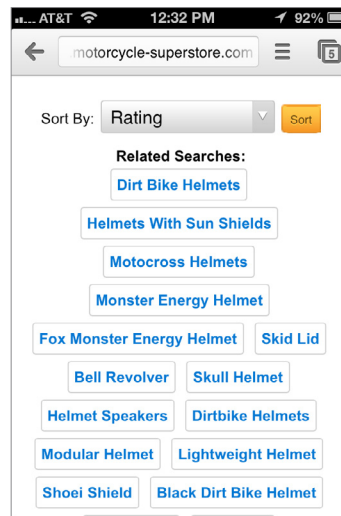
7 For All Mankind offers mobile shoppers many refinement options

## Take Advantage of the Bottom of the Page

It is important to push pagination, related searches and sort options to the bottom of the search results page to keep search results highly visible at the top. Motorcycle Superstore is a good example of what the bottom of a mobile search results page should look like. The pagination is presented as just a “next page” button, as opposed to a list of page numbers you would expect to find on a regular site, and the sort option is a drop-down box as opposed to a list. The key is to transfer the same functionality found on your regular website, only designed for a mobile device.

## Add Additional Search Box at the Bottom of the Page

Add another search box at the bottom of the results page. This way, if users get to the bottom of the page and want to conduct another search, they can do so easily without having to scroll back to the top of the results. Adding a bottom-of-the-page search box is a recommended best practice.



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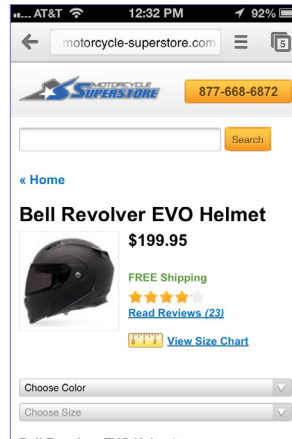
Motorcycle Superstore lists “Related Searches” at the bottom of its search results page

## Offer Infinite Scrolling

You may find that shoppers spend more time on your mobile site if you provide infinite scrolling. Instead of requiring shoppers to click to the next page, infinite scrolling automatically loads more search results as the user nears the bottom of the page.

## Include Easy Access to Product Ratings and Reviews

Mobile shoppers often use mobile sites to access product ratings and reviews while shopping in the store. User reviews can be the best way to give visitors the information they need to make a purchasing decision, so it is important to include them in your search results. Motorcycle Superstore, for example, includes star ratings as part of the product information.



Product description with product ratings and reviews

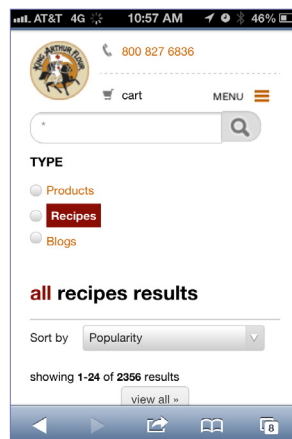
## Check Availability at Local Stores

Make it possible for your customers to “check availability” at local stores from site search results. Provide this as a link so that customers can enter their zip code and see what nearby locations might have the item in stock. Take it a step further and allow them to place the item on hold, to be picked up at a later time.

## Offer Non-Product Content

Many e-commerce sites offer content other than just product information. There are blogs, articles, videos and other social media content that is relevant and important for your visitors to easily access. When designing a mobile version of your site, make sure all this content can be found as easily on a mobile device through site search as it is on your regular website. One way to do this is with tabs or radio buttons. King Arthur does this well by providing radio buttons on its search results pages for recipes and blogs, in addition to the product information. However, this strategy may not work for every site. Some retailers have achieved similar results with refinements, where “products” is the search results default.

Download our e-book about using creative content to convince shoppers to buy  
[www.sli-systems.com/content](http://www.sli-systems.com/content)



Non-product content tabs

## Include Social Media Content in Search Results

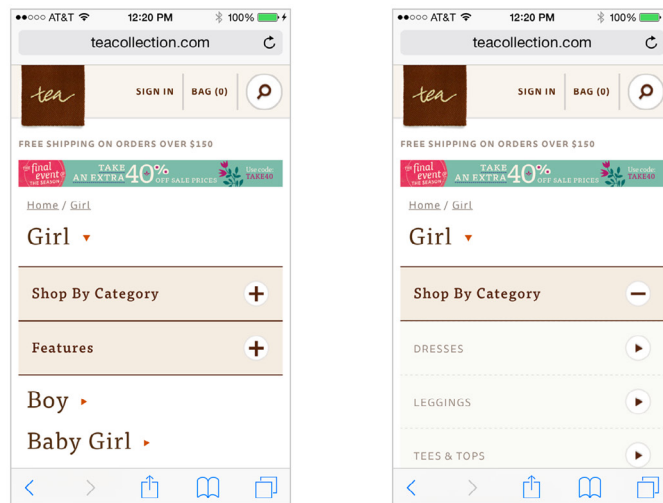
Adding blog content and Facebook or Twitter posts to search results allows shoppers to get a richer picture of the products you offer. You can also add Likes and Pins to your search results in order to guide your visitors to the most popular products on the social networks. This allows you to use the powerful influence of social media as a tool to increase buyer confidence and conversions. Using small icons to save valuable space is recommended.

## Offer Mobile Coupons

Mobile shoppers love a good deal. According to KISSmetrics, 75% of mobile shoppers have used a mobile coupon. With this in mind, you can get creative with the discounts you offer to your mobile customers. Ideas range from providing coupons on your mobile site to sending special deals directly to your customers' phones.

## Mobile Navigation

The limited space on smartphones and tablets magnifies the importance of intuitive navigation. To best orient users and guide them through a mobile site (without cluttering the screen), we recommend a simple design. Using drop-down menus with buttons or simple text allows you to offer as many drill-down levels as needed while freeing up valuable real estate. Subpages can expand using familiar icons such as +, -, and >. This allows shoppers to easily navigate through categories to exactly the products they are looking for. The category pages should look and feel similar to the search results pages to give users a consistent experience across search and navigation. Products found through navigation instead of the search bar should also include a thumbnail image, product title, brief description, price and additional information such as ratings and discounts.



Tea Collection uses familiar icons to help shoppers navigate its mobile site

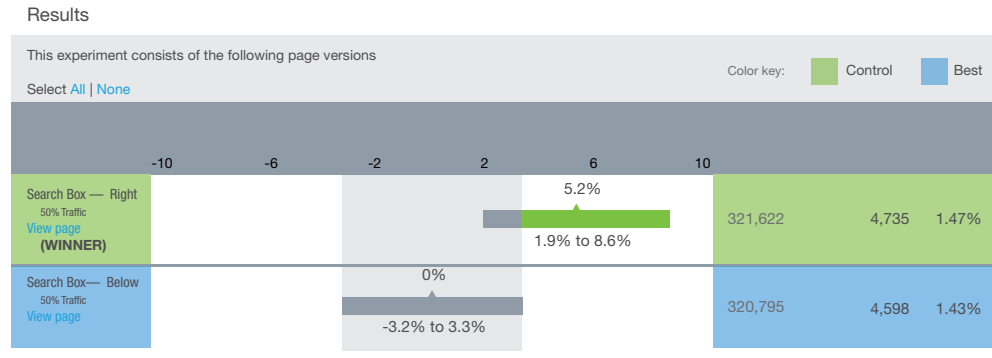
## Make Checkout Easy

When you allow visitors to check out quickly and easily, they're more likely to complete the purchase. The key is to speed customers through checkout with as few steps as possible. To do this:

- Reduce form length to fewer than six fields, and show progress if there are multiple steps
- Top align form labels for easy readability while typing
- Allow guest checkout
- Allow payment options like PayPal, Google Wallet and, for mobile apps, Apple Pay

# Testing and Analytics

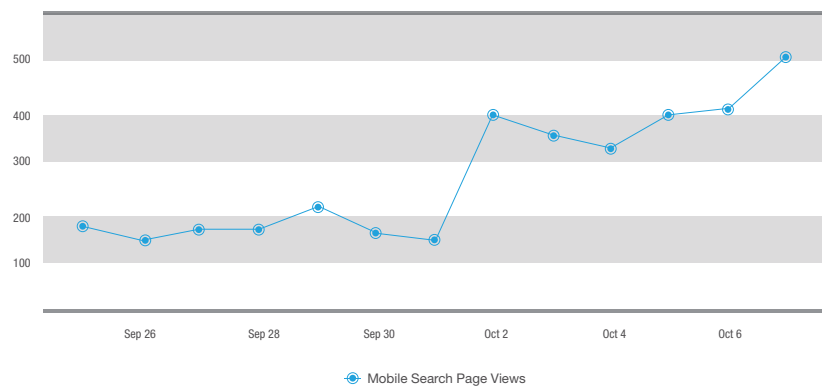
The mobile web is still evolving, and different user demographics have different expectations. The only way to find out what is right for your site is through testing. A/B testing different layouts and configurations was harder to do in the past because of small traffic volumes, which made it difficult to get statistically meaningful results. However, as traffic continues to increase on the mobile web, you can now run tests with more confidence and understand which options truly give the best conversion rates.



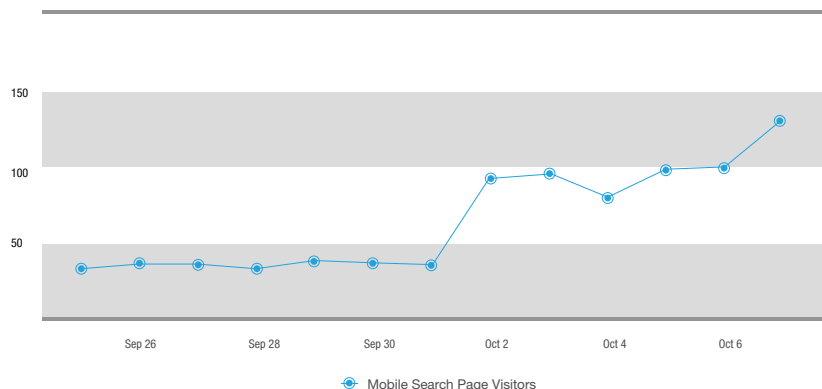
## Multivariate testing for search box placement on a mobile site

Analytics tracking can also help you better understand your mobile site's performance. Monitoring page views, visitors, clickthrough rates, transactions and revenue can provide insight into which promotions are doing well and what can be improved.

### Mobile Search Page Views



### Mobile Search Page Visitors



# Getting Started: How Do You Implement It All?

Whether you choose to go with a mobile app, a dedicated mobile site or responsive web design, you will also need to decide between building your solution in-house, buying off-the-shelf software or using a hosted-services solution.

An in-house solution will allow you to build the custom functionality you need. However, the higher expertise and ramp-up time required could make the cost-to-solution very expensive. Off-the-shelf software solutions may provide rich functionality, but the upfront costs, long implementation cycles and long-term commitment can often be prohibitive. With a hosted solution, retailers benefit from shorter implementation times and lower costs of ownership. However, many hosted providers offer template-based cookie-cutter solutions and allow limited modification.

Ideally, you want the best of all three worlds – a hosted solution that provides custom-tailored functionality and superior customer service for ongoing refinements. This way you can adapt your mobile site to changing user needs and trends while limiting the expense.

Solution Options	Custom Functionality	Ongoing Support	Affordable Cost of Ownership	Quick to Implement
In House	✓	✓	✗	✗
Off the Shelf	✓	✗	✗	✗
Hosted (most providers)	✗	✓	✓	✓
Hosted (SLI Systems)	✓	✓	✓	✓

Mobile commerce is still evolving, and mobile shopping will continue to increase as more consumers adopt mobile devices and embrace the benefits of using the web on the go. The challenge for retailers is to make the mobile shopping experience as fast, easy and fruitful as possible, so that more browsers turn into buyers. Site search plays a significant role in a successful mobile shopping experience by making it possible for shoppers to find the products they desire within the limitations of a handheld device. To ensure the best possible user experience, testing the features on your mobile site is highly recommended. Look for a site search provider that can share its expertise and offer a custom-tailored hosted solution with superior service to carry you through not only the implementation, but also the process of fine-tuning the user experience over time.

# Next Steps

- Decide whether you want to go with a dedicated mobile site or a mobile app
- Decide how you will build it (in-house, off the shelf, hosted solution)
- Design using the best practices mentioned in this paper
- Create an amazing user experience by using the best search and navigation
- Choose a vendor that provides superior customer service and ongoing testing, analysis and improvements

## When Choosing a Vendor, Consider SLI Systems

SLI Systems is the leading provider of site search, navigation, merchandising, mobile, recommendations and SEO solutions to top retailers around the world. Since 2001, we've been perfecting our patented learning engine and improving our customers' e-commerce profitability. Hundreds of customers worldwide have shared their analytics with us, revealing dramatic results since implementing SLI. It's common to see a range of benefits including more conversions, higher order values and increased time on site. Other benefits of SLI:

- As you provide the ideal search experience to your customers – whether on their PCs, tablets or smartphones – you build incredible brand loyalty
- With our user-generated SEO, more of your products are found and purchased through organic search, spurring your business' growth and profitability
- Our rich in-depth reporting system provides you with data on what your visitors are looking for, what they are finding and what they are NOT finding on your site
- Our SaaS model allows us to deliver fast rollouts and easy scalability so your site stays at the forefront of current e-commerce trends
- Our Customer Success Managers proactively work to maximize your search and user experience, which frees your time to focus on other aspects of your business
- With our redundant servers in multiple data centers in different geographies, your site is prepared for unexpected outages or traffic spikes

SLI Systems (SLI.NZ) is the most chosen SaaS-based site search provider to U.S. Internet Retailer Top 1,000 retailers and operates on five continents. To learn more about how SLI Systems can accelerate your e-commerce sales, visit [sli-systems.com](http://sli-systems.com) or email [discovery@sli-systems.com](mailto:discovery@sli-systems.com).

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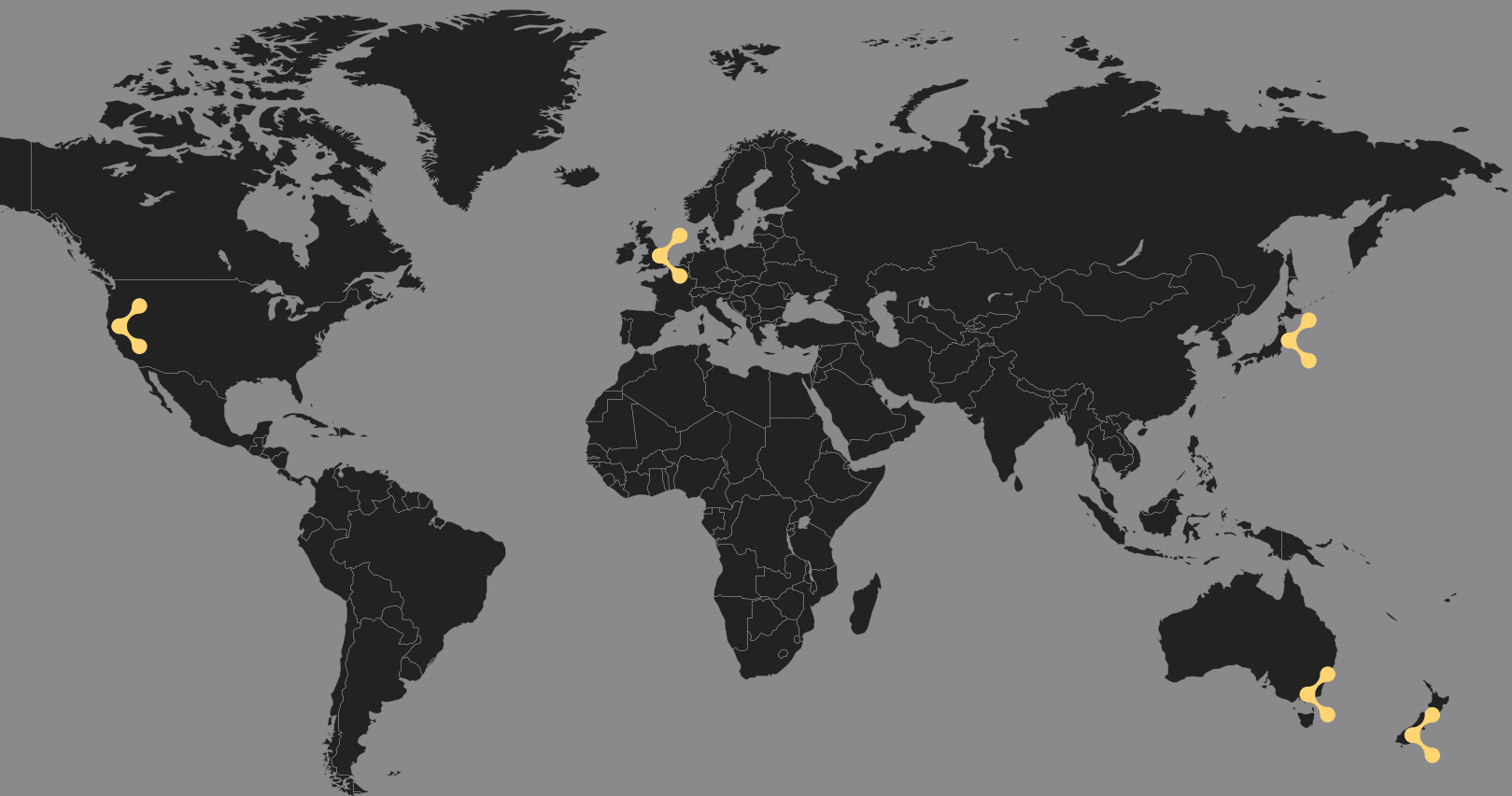
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# About SLI Systems

SLI Systems enables the world's leading e-commerce retailers to increase sales by connecting shoppers with the products they're most likely to buy. With proven search technology that learns from the activity of real site visitors, SLI delivers SaaS-based site search, navigation, merchandising, mobile, recommendations and SEO solutions that arm retailers with the tools they need for rapid growth.

To learn more visit [sli-systems.com](http://sli-systems.com),  
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