Moving Beyond E-Commerce Platform Search to Deliver a Richer Shopping Experience
Introduction

The most popular e-commerce platforms include some form of search and navigation capabilities. These built-in tools often provide you with basic keyword search and category navigation. This allows your visitors to find products in two ways: via the search box and by navigating through a hierarchy of product categories and sub-categories.

Some e-commerce platforms will also offer upgraded search features based on the Apache open source search solution, Solr. Platforms such as Magento and WebSphere Commerce offer Solr as an add-on or in their higher end platform offerings. Although Solr offers better search, it still has its limitations.

So, with such capabilities offered by the e-commerce platforms, this begs two important questions:

- What value does a 3rd party search and merchandising solution offer over and above those provided by the e-commerce platforms?
- What capabilities should you look for in a 3rd party search and merchandising platform to help deliver a richer shopping experience on your e-commerce site?

This white paper will examine these two questions and provide you with poignant answers so you can accurately determine when and why you need to move beyond your platform search.
What Comes with Your E-Commerce Platform

E-Commerce platforms such as Magento, NetSuite, WebSphere Commerce and others are optimized to provide an array of e-commerce services to help you best deliver an e-commerce site. This includes a shopping cart, content management system, product catalog management, customer relationship management, order management and more.

Among the features included in many e-commerce platforms are search and navigation. This search and navigation provides good, but basic services that any site would require:

- Keyword search based on a finite number of attribute fields from your product catalog
- Site and product navigation based on a category and sub-category hierarchy defined in your e-commerce catalog

For some firms with a small number of products on focused markets, these basic services are often enough.

Some e-commerce platforms, such as Magento and WebSphere Commerce, will offer a search and navigation "upgrade" option based on the Apache open source offering Solr. Solr is popular in the open source community and offers a number of interesting capabilities beyond those provided in the standard e-commerce platform search including: scalable performance, extensibility to more catalog fields/attributes, faceted search and auto-suggestion.

However, even Solr also has its limitations, many of which begin to show up as e-commerce sites and operations grow:

- The Solr administration via HTML interfaces, XML and files becomes laborious when the number of search terms the site needs to support grows
- Solr lacks support for spell-correction and stemming forcing admins to enter all the various word forms into the system manually and increasing the management burden
- It lacks advanced search capabilities to process long-tail search terms that "semantic" and "natural language" engines can process – "mens blue polo shirts under $50"
- Solr rules for navigation, sorting or merchandising are defined in SQL requiring IT support and slowing the ability for business users to inject change to the site
- The Solr reporting focuses on the technical deployment aspects, while neglecting the more important and actionable customer experience analytics

Third-party search, navigation and merchandising solutions, such as EasyAsk, offer more advanced features than Solr that improve the customer shopping experience. These features also make it easier and faster for the business owners – merchandisers – to deliver the shopping experience on their own and reduce the overall administrative cost and burden.
Why Upgrade?

For firms just starting out in e-commerce or those with a limited number of products that are easy to find and navigate, these basic services provided by the e-commerce platform and Solr upgrades can be enough.

But, at what point does the business outgrow those capabilities? That can happen when any of the follow occurs:

- The number of products you offer on your site grows
- The variances of the products (a.k.a. SKUs and attributes) grows
- The ways in which you want to describe product options in your navigation become more variable – different price ranges, different sizes or colors, etc.
- The ways in which you want to merchandise your products gets more sophisticated – fast changing promotions, cross-sells, up-sells, etc.

The changes in product characteristics sneak up on online businesses very quickly. The business grows rapidly, new products and variances are added to meet that growth, and suddenly the product catalog becomes unwieldy and products become difficult to find and merchandise on the site. At this point, the business has outgrown the search, navigation and merchandising functionality that comes with your e-commerce platform – even with upgraded options, like within Solr.
What Are the Driving Requirements?

When your site requirements for search, navigation and merchandising move beyond those provided with your e-commerce platform, what capabilities should you look for in a third party solution? These features should be based on one simple rule – is the solution helping me deliver the best shopping experience for my visitors?

As your business grows, the complexity of delivering a great shopping experience becomes more complicated:

- A great number and a wider variety of products presents a problem in "findability" – can visitors search effectively to find the products they are looking for using both short descriptions and long descriptions?
- Larger numbers of visitors creates a greater need for error tolerance – mis-spellings, different tenses, unknown attributes – and the need to deliver products to customers when these errors occur.
- As visitors navigate, the diversity in the ways in which they want to find products grows – price bands, product attributes (color, size, etc.), product make up (fabric, metal type, etc.) and more – and the rules to enable these attributes become extremely complex.
- Your need to micro merchandise grows – identify and reach out to specific customer groups that are looking for specific types of products – creating the need to rapidly adjust merchandising promotions and rules.

The best way to approach this is to compare an in-store shopping experience to that of your e-commerce site. In an electronics store, if a customer asked for a "62 inch LED HDTV", and you didn't have any 62 inch models, would the sales person say "No" and let the customer walk out the door? Of course not.

So why should your e-commerce site do the same? Your e-commerce site needs to understand that there are not 62 inch models when someone searches for a "62 inch LED HDTV" and still find a way to deliver products that the customer will be interested in.

With these new requirements, it is necessary to find a solution that can deliver on all these requirements, and make sure you deliver the best shopping experience.
What Should You Look for in a 3rd Party Solution?

When looking for a 3rd party e-commerce search, navigation and merchandising solution, there are a number of key requirements that the solution must do:

- **Always return results** – or to put it another way, eliminate the “No Results” page. There is nothing more frustrating to a site visitor to perform a search and see a “No Results” page. The number one job of your e-commerce search engine should be to make sure results are returned whenever possible.

- **Return tuned, accurate results** – a second pet peeve of site visitors is to perform a search and have to wade through a volume of results that were not germane to their search. If always returning results is the first job of your e-commerce search, a close second is never delivering too many results.

- **Offer dynamic faceted navigation** – buyers will come to your site with a very specific set of attributes in mind, while shoppers will want to see a wide variety of attributes to guide their decisions. Therefore, your e-commerce search solution needs to provide dynamic navigation that adjusts to the visitor and the products they are exploring.

- **Enable effective merchandising** – If you have delivered the previous capabilities in your e-commerce search, then you will have happy visitors who will be far more responsive to attractive promotions and offers. A superior e-commerce search platform will also help you deliver customized, attractive offers and promotions, which will increase purchase sizes and wallet-share.

- **Deliver rich analytics for proactive management of the search environment** – your customers, products and marketplace are continually shifting. It is critical that your team of merchandisers can stay on top of trends and consumer shifts in order to rapidly tune the e-commerce search and merchandising. To serve this need, it is critical that the e-commerce search provide detailed, actionable analytics.

**Platform Integration**

An additional consideration with the 3rd party search solutions is: how integrated is the solution to my platform? Many SaaS search solutions are disconnected from the e-commerce platform creating extra administrative work in implementing and supporting the solution. Some SaaS solutions also use sub-domains, further disconnecting the search from the site and hurting the Search Engine Optimization (SEO) of the site.

Some e-commerce platforms are used "on-premise" – on servers owned and operated by the business. They do this for greater control of the site and the performance of the site. So, another question to ask your 3rd party search provider is: do you offer an on-premise version? If not, then you may lose the type of control on the search environment that you sought with your platform.
Building a Better Shopping Experience with EasyAsk

EasyAsk eCommerce Edition is specifically designed to help your business deliver the richest online shopping experience to convert more visitors. With EasyAsk, your e-commerce site will be fully optimized to deliver on its main objective – increase sales and revenue.

Many of the features of EasyAsk eCommerce Edition go beyond where e-commerce platforms and Solr leave off – delivering a richer search, navigation and merchandising experience for your customers.

Natural Language Search for Accurate Results

A great benefit of a growing Internet business is that you get return visitors. But the catch is that return visitors often know exactly what they are looking for – and search specifically for that. On a hardware site, long tail searches such as “3/4 inch jobbers drill bits” are very common.

EasyAsk has delivered natural language search for over a decade, offering semantic search before other search engines had even dreamed of semantic search. No other e-commerce search engine supports the degree of natural language semantic processing as EasyAsk, allowing your customers to enter searches to any degree of sophistication.

EasyAsk natural language isn’t just for "long tail" searches. The rich linguistic processing helps any length search by "understanding" the relationships between words and how they apply to the underlying product catalog. This means natural language processing understands BOTH the intent of the search AND the content of the catalog to deliver the most accurate results in the industry.

Rich Linguistics Processing that Eliminate "No Results" Searches

The most frustrating experience a user can have with site search is to get a “no results” page. This happens when the search engine cannot match the user’s search to any of the products.

EasyAsk eCommerce Edition includes rich linguistic processing features such as automatic spell-correction, stemming and relaxation that virtually ensures your visitors will always see results to their searches and eliminates the dreaded “no results” searches.

The EasyAsk analytics automatically track every search that customers perform to help identify new terms that customers are using. Even more, the analytic reports are actionable – for each search performed, site administrators can add those terms and associate them with specific products in a single click.

Dynamic Faceted Navigation

As your product offerings grow, the navigational attributes become more varied. And as your audience becomes more diverse, they want to navigate in different ways. You can no longer rely on static categories or even a small number of single facets such as price bands or colors.

EasyAsk makes it easy to extend your navigation to use dynamic attributes. Merchandisers simply create attribute rules using natural language to dynamically derive attributes on the fly for visitors. This allows the attributes to be tailored to the product areas the visitor is exploring making navigation faster and easier.

The natural language rules can derive attributes from any fields in your product catalog. This adds to the richness and diversity of the navigational attributes.
Easy Merchandising for Business Users

Growth also introduces another problem to an e-commerce operation: merchandising. More products, a more diverse audience, and increased competition create a need for agile merchandising on the site to quickly deliver new promotions and offers.

EasyAsk offers a rich suite of merchandising tools in the EasyAsk Commerce Studio that allow the proper people – the merchandisers – to promote products on your site. This eliminates the time consuming task for IT staff to translate merchandising needs onto the site design and reduces the potential for "errors in translation" from the business needs to the technical implementation on the site. New promotions and offers are implanted fast and effectively.

The EasyAsk natural language rules also make it easy for merchandisers to create highly targeted offers and promotions that appeal more directly to specific visitor segments. The rules are easy to specify and can raise specific offers to visitors based on what products they are searching or navigating.

Rich, Actionable Analytics

The final problem many sites see due to rapid growth is in tracking visitors and adjusting the search, navigation and merchandising to the needs of their visitors. As the audience grows, so does the number and breadth of search terms and navigational clicks, and the results of these actions grow exponentially. Adjusting the site to these needs becomes BOTH more important and more difficult.

EasyAsk provides a complete set of out-of-the-box analytics that track visitor behavior and the business results of that behavior – purchases, abandoned carts, etc. This allows you to see the complete picture of customer behavior and tune the shopping experience to get better results.

Also included are actionable reports that directly track detailed aspects of search, navigation and merchandising. These reports are actionable because each allows you to tune the environment with a single click from within a report. If customers are searching using an industry specific term not inside your catalog, it requires only a single click within the report to add and associate products to the new term.

EasyAsk analytics also provide merchandisers with a glimpse into additional products or services they can offer, and how to best merchandise to those customers. A retail sunglasses site not carrying Bolle sunglasses can see that customers are searching for Bolle products, and quickly: (a) add offers of other polarized sunglasses to visitors that perform a Bolle search, and (b) use this knowledge to add Bolle products to the site.

You are In Control

An important aspect of EasyAsk is that we put you in full control. Other SaaS based search and merchandising solutions give you limited control of the search and merchandising environment, leaving you dependent upon the solution provider to implement changes, thus driving up operating costs.

The EasyAsk tools and analytics are so easy to use that site managers and merchandisers can work together to deliver the best shopping experience. This puts full control in the hands of your professionals, the ones who know your business best, and lowers the overall cost of ownership for the search and merchandising solution.
Integrated with Your E-Commerce Platform

EasyAsk ensures easy integration with the all the major e-commerce platforms on the market to reduce implementation costs and have customers encounter a seamless shopping experience.

SaaS-based solutions use sub-domains which cause trouble with site SEO – URLs managed by the search solution will not be crawled and understood by the search engines. SaaS solutions are also often disconnected from the product catalog, forcing your team to create a new feed to the search provider.

EasyAsk integrates directly with the site via APIs, working within the same site domain to show search results, landing pages, and more. This maintains the high degree of SEO that your team worked so hard to deliver. EasyAsk also directly integrates with your product catalog providing more flexible means to use the data in the search and merchandising environment.

Available On-Premise or SaaS

EasyAsk has BOTH On-Premise or SaaS versions available, giving you the choice of the options best suited for your e-commerce site and operation. Both versions provide full integration with your e-commerce platform to maintain high degrees of SEO and easy product data integration.
Conclusion

The search and navigation options built into e-commerce platforms such as Magento, NetSuite, WebSphere Commerce and more are often an adequate way for sites to deliver basic services for their customers to find products. The "upgraded" option to some of these platforms, Solr, can provide a few more advanced search and navigation techniques that help sites even further.

But as sites grow both in terms of product offerings and visitors, they can quickly outgrow the capabilities provided by their e-commerce platform. The customer shopping experience will worsen, causing the conversion rate to drop and lose sales.

Smart e-commerce companies anticipate these needs and turn to third-party search, navigation and merchandising solutions from companies like EasyAsk. Some firms expect growth and will build more advanced search and merchandising from day one. Others feel the pain as they grow, and are quickly able to upgrade their site because of the EasyAsk's unique integration into their existing e-commerce platform.

EasyAsk allows your site to grow the shopping experience with the rest of your site. It helps you accommodate the growing number of visitors and their diverse ways of looking for products, and to increase your conversion rates as you grow.
About EasyAsk

This paper was brought to you by EasyAsk, the company that is radically changing the speed and ease of how people find information through our groundbreaking natural language search and query software. EasyAsk software products go far beyond traditional search, allowing users to simply ask questions in plain English and receive highly tuned results on demand. The EasyAsk eCommerce Edition uses this unique technology to deliver an industry leading website search, navigation and merchandising solutions that boosts online revenue through increased conversion rates, better customer experience and agile merchandising. EasyAsk Business Edition revolutionizes enterprise decision-making, moving beyond traditional business intelligence solutions with easy, low-cost deployment and a unique natural language interface that extends access to information anywhere in the organization.

Based in Burlington, Massachusetts, EasyAsk is the leader in natural language software and solutions. Customers such as the North Face, Anna's Linens, True Value, Coldwater Creek, Aramark, Journey's, Harbor Freight Tools, Hartford Hospital, and Ceridian rely on the EasyAsk software products to run their business and e-commerce operations daily. For more information, please visit http://www.easyask.com/.