



INNOVENT
SOLUTIONS

Spotlight on Client Success

CLIENT PROFILE

Name:

Internet Retailer Top 10

Description:

A Major retailer of apparel, home and automotive products and services. With a Customer base of over 60 million households.

Industry:

Retail and Manufacturing
Home Goods

Need:

Relevant search results within a 2,000,000 item product line.

Results:

Increased relevancy and improved merchandising within e-commerce platform.

BACKGROUND

An Internet Retailer Top 10 firm with a Customer base of over 60 million households, was conducting a major upgrade of their eCommerce site search and navigation platform. As a long-established client of Mercado, now Omniture, the desire was to incorporate the new and improved features that come with the latest release of Mercado into their website. The new features would eliminate the need for various customizations that had been performed by the client. Additionally, there was a desire to improve search performance as well as provide a higher level of site statistic reporting.

Among the objectives of the project were to utilize Mercado's new auto-ranking formulae, including incorporation within an expanded selection of Merchandizing zones. Since custom built code was to be eliminated, the upgrade needed to be performed in a way that minimized or eliminated impact on the existing website, leveraging the existing structure as much as possible. All of this was to be accomplished with a significant increase to the number of products currently offered on the site.

BUSINESS CHALLENGE

The project tasks were essentially organized around three themes: adopt new features, minimize impact to the existing site and accommodate a growing catalog of products.

Adopt New & Improved Features

- **Auto-Ranking formulas:** implement a method to sort product results based on metrics such as conversion rates, revenue generated, and sales rank.
- **Site Statistic Integration:** Collect statistics from a third party system and include in the search results to use for auto-ranking.
- **Merchandising Zones:** Expand Merchandising Zone capability from one to possibly six new zones. Zones were to be four standard zones: Best Selling Products, Recommended Products, Featured Products, and Related Products, and two Custom zones. The four standard Zones needed to be populated by metric data, and the two Custom zones needed to be populated by user input.
- **Auto-Ranking for Merchandising Zones:** Similar to Auto-Ranking for product results, the ability to provide the same Auto-Ranking formulae to each merchandizing zone separately based on business rules was also needed. For example, instead of Best Selling products being populated only by the best selling metric, it could be overridden and populated by an Auto-Ranking metric such as 40 percent best selling, 20 percent revenue, and 40 percent a combination of other metrics.

Minimize Impact to the Site

The client had several custom-built features that could be replaced and improved by the upgrade to the new Mercado release. As such, a challenge of the project was to ensure that application calls to the search engine and the resulting results structures be similar, if not exact, to what already existed in the current solution, so as to minimize development and testing efforts.

Accommodate Growing Product Catalog

The last challenge was to increase the number of products available in the shopping catalog. The current solution for the retailer had 150,000 products in the database, and only linked to outside vendors. The new solution needed to include products from their internal catalog, thus bringing the searchable product count up to as high as 2 million. This task necessitated being able to read external vendor product feeds and include them in the Mercado pyramid search results.

SOLUTION

The solutions to these challenges were solved at a high level with cooperation with resources from Innovent Solutions, Mercado, and the Retailer's eCommerce team. A coordinated effort from the three teams identified and minimized potential issues, developed and tested the solutions, and minimized risk.

Adoption of New & Improved Features

The client's custom built solutions needed to be replaced with new, improved and standard product functionality. Prior to doing so, each custom built solution needed to be mapped and assessed for compatibility. Once the new features were incorporate, each was tested independently of the custom solution to insure functionality was not lost and the expected improvements were made. Site statistic integration was achieved by obtaining the data feed formats and feeds in a consistent location for daily retrieval and incorporating the data into the search index.

Minimize Impact to the Site

With close coordination with the Retailer's eCommerce team, a plan was developed and executed to achieve product result sets that were the same as the existing solution, but with the new auto-ranking features. This helped minimize development efforts within the existing site.

Accommodate Growing Product Catalog

With extensive testing, the project team was able to perform incremental testing to find a threshold of over 3 million products possible with no detriment in performance for the solution on a single instance of Mercado. This allowed for significant growth as more and more vendor products are added. By working closely with product vendors, a data feed format and integration of the vendor products was achieved and all features, such as participation in auto-ranking and sorting, were possible with the new vendor data.

THE RESULTS

In coordination with the Retailer's eCommerce team, Innovent Solutions and Mercado created a comprehensive testing plan which was executed with success. With proper planning, collaborative development and minimal testing iterations, the solution was delivered ahead of schedule. Performance increases over the previous solution were an order of magnitude higher.

The number of search servers was reduced from nearly sixty Solaris instances to twenty-eight Intel based servers running Linux. Search performance, in terms of queries per second, was increased nearly 150% for a single search instance.

Together, these improvements provided for significant cost reduction and significant performance gains. The client was extremely thrilled to have the solution delivered on time, as promised.



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Innovent Solutions is a consulting firm, dedicated to the improvement of decision making through effective information management. We build systems that enable our clients to:

- Find the information they want and need
- Understand the relationships and meaning of that information
- Trust the information to be accurate and timely

Innovent Solutions is a privately held company headquartered in Los Angeles with offices in San Mateo, Minneapolis, and Raleigh.

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How can we help you?

Through partnership with Omniture, now Adobe, Innovent Solutions specializes in the implementation of Mercado's search, browse and merchandising solution. Innovent Solutions consultants work with clients to gather business and technical requirements, locate and aggregate content, and build the rules that enable a merchandised e-commerce site. Our services include:

- Fast start implementation including data extraction and normalization, index building and website/e-commerce application integration.
- Reporting, analysis and measurement services
- Natural Search Optimization
- A/B testing
- Data Quality services
- Version Upgrades