

## CLIENT PROFILE

### Industry:

Electronics Retailer

### Need:

Improve shopper experience by providing better search and navigation.

Replace Endeca to empower business users & reduce operational cost.

Provide precise merchandising to better target shoppers.

### Results:

Search and navigation is built on best of breed, high performance open source search platform.

Precise merchandising is enabled by FindTuner.

Improved customer experience with more relevant product search that leverages rich sales and analytics data.

## BACKGROUND

Client sought to replace its aging Endeca platform to achieve some important goals, including gaining control over the search codebase, reducing costs and providing better customer experiences. Client partnered with Innovent Solutions to replace Endeca with FindTuner and Solr to power search, navigation and merchandising on its ecommerce store, which has several million visitors each month and averages many thousands of unique searches per day.

## BUSINESS CHALLENGE

Investments in search are driven by the core tenet that it must improve customer experience. With this in mind the following opportunities were identified for the project.

- **Replace Endeca**—Key goals included empowering business users, reducing operational costs, and gaining control of all search code. The previous environment contained many thousands of rules, synonyms and other linguistic exceptions. Client wanted to retain much of the merchandising behavior when converting to a new platform but reduce complexity and minimize manual efforts.
- **Deliver a great search and navigation experience**—The core search experience with the previous platform was serviceable, but required a high degree of maintenance. Numerous rules were required to achieve the search experience Client expected for their customers. The new search platform needed to provide better tools to manage relevancy with less manual intervention and seamlessly handle Client's robust catalog which contains many levels of complex hierarchical taxonomy with products interspersed throughout many branches.
- **Merchandise with precision**—Client required a solution that had all the features of the old platform, but wanted additional precision to target shoppers more effectively. Client customers primarily use search to find products, and a key requirement was to deliver the shopper a well-curated experience that best matches their intent.
- **Provide high performance**—Search and navigation from the new platform was required to be well under 100ms in speed to meet Client performance goals. With a growing shopper base, increasing mobile traffic, and a desire to continuously improve customer experience, the search platform had to perform optimally under any condition.

## SOLUTIONS

Client partnered with Innovent Solutions to implement Solr and FindTuner. FindTuner enables merchandisers to plan, customize and optimize the way shoppers search and experience the ecommerce store. Business strategies are implemented to create effective product promotions, curate the shopper experience and provide results using query profiling and shopper analytics and metrics.

**Replace Endeca**—The old environment contained many thousands of rules, thousands of synonyms and other linguistic exceptions, all of which were evaluated for suitability and staleness. The synonyms were found to be mostly unnecessary with the new Solr configuration, reducing nearly ten thousand entries to only a few hundred. Stale rules from the old platform were culled and a reduced set of active rules were automatically imported into FindTuner. Rules were automatically tagged to provide clear visibility of imported rules to facilitate testing. Custom content actions were converted into FindTuner plugins enabling spotlight features and custom navigation elements to be triggered by category navigation and keyword searches. The old platform features were fully realized through FindTuner's category redirection and drilldown rules, product promotions and curated results, and complex boost strategies.

**Deliver a great search and navigation experience**—Innovent provided best practice Solr consulting and advisory services related to server architecture and design, data modeling for the product catalog, and server sizing to enable the provisioning of environments. Innovent worked with Client to build their existing taxonomy in Solr to support existing navigation experiences and ensure that intuitive, highly relevant search was easily achieved. Innovent worked closely with Client to tune the Solr configuration for best-in-class search that delivered highly-relevant results.

**Merchandise with precision**—With better search results, Client requires fewer rules and instead focuses on targeting their shopper. FindTuner's robust and powerful triggering mechanisms provide dramatically better precision to greatly improve merchandising and conversion opportunities.

**Provide high performance**—FindTuner and Solr's performance met and exceeded Client's desired goal of a sub-100ms response time. With thousands of merchandising rules analyzed for millions of requests per day, the performance of the platform allowed Client to deliver exceptional search results at previously-unmatched speeds.

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## THE RESULTS

FindTuner delivers feature-rich merchandising that fully replaced features provided by Endeca. FindTuner provides additional merchandising capabilities that precisely target shoppers and enrich the customer experience.

Search and navigation is built on Solr— the best of breed, high performance open source search platform. Customer experience has been greatly improved, providing more relevant product search that leverages rich sales and analytics data and matches the shopper's intent.

The platform delivers exceptional search results at previously-unmatched speeds.

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### About FindTuner®

FindTuner creates engaging search experiences that convert shoppers into buyers. FindTuner provides a comprehensive suite of features that give merchandisers the power and control to easily implement strategies that provide high-quality, relevant search results, enhance and personalize the shopping experience and optimize revenue and profitability. FindTuner works with any ecommerce site that is powered by Solr, including SAP Hybris, Magento, Websphere Commerce and Broadleaf.

Innovent Solutions is a privately held company headquartered in Irvine, California that provides consulting, training and support services and solutions for Search, Business Intelligence and eCommerce technologies.

## Key Merchandising Features

- **Product promotions** to promote, demote, hide, show, and perform other precise actions.
- **Automated relevancy** that uses machine learning to drive the best results from shopper behavior, buying patterns and analytics.
- **Curated results** that ensure the perfect product visibility and placement.
- **Guided navigation** to reorder, hide and show categories and values.
- **Data-driven boost** to dynamically rank search results using metrics such as revenue, ratings, inventory, sales rank, or any combination.
- **Banner displays** based upon search query and results, organic search, PPC campaigns and more.
- **Redirect** shoppers for common searches such as Customer Service or Shipping.
- **Zero results handling** to ensure content is always visible.
- **Manage synonyms**, stopwords and other aspects of Solr using the Solr Configuration Editor.
- **Precise query handling** to increase precision and relevancy, flawlessly handle multi-word synonyms and auto-correct queries.