



## HELPING CUSTOMERS FIND THE RIGHT PRODUCTS

### COMPANY

A leading life science and high technology company, Sigma-Aldrich Corporation provides biochemical and organic chemical products and kits used in scientific and genomic research, biotechnology, pharmaceutical development, disease diagnosis and as key components in pharmaceutical and other high technology manufacturing

### CHALLENGE

Ensure customers can quickly and easily browse the online catalog and access information from multiple sources — to help them find, and buy, the right products

### SOLUTION

Endeca for B2B eCommerce with the Guided Navigation® experience and Advanced Search, providing fast and easy access to integrated product data and related information from a single interface

### BENEFITS

- Raised the conversion rate 75%
- Improved the add-to-cart rate by 294%
- Increased successful searches to 84% from 53%
- Improved search performance by eight to 12 times
- Increased site traffic to the final product detail page by 80%
- Achieved ROI in under six months

A leading, \$1.4 billion life science and high technology company, Sigma-Aldrich Corporation needed to replace its search engine. Prospective buyers utilized its Web site as a valuable resource for information, serving as a critical sales channel. But search was slow, and the right product was hard to find. To ensure visitors found what they needed, Sigma-Aldrich chose Endeca. Endeca's integrated Guided Navigation® experience and advanced search improved search success — and provided access to information from various sources, to help users make the right purchases.

### Fixing sub-optimal search

Sigma-Aldrich sells 260,000 complex products — chemicals, reagents, and kits — to scientists in research institutions and industry in 32 countries via the Web. The company recognized the importance of the online channel, exhibited by the high rate of traffic on the site, but a serious obstacle prevented maximizing online sales. "The way we searched and presented information was sub-optimal," says Daniel Boesch, Sigma-Aldrich Marketing Manager. "Customers had a hard time finding what they were looking for."

Search results were difficult to navigate, and only 53% of searches yielded the right product. Information was limited to the product catalog. Page load times were slow. And product updates were time-consuming and, therefore, were performed only monthly. It was time to look for a new search technology to increase sales.

Sigma-Aldrich went shopping for a solution with a list of objectives. Most importantly, the company needed a product that could improve the searching and browsing experience and integrate diverse sources of product information. In addition, it wanted a product that could improve the presentation of the product data, provide more frequent updates; handle data expansion to 400,000 products, with ample room to grow; and work with

existing technology for easy deployment. "We looked at several companies in the evaluation," says Boesch. "With Endeca, a number of criteria came together. We believe Endeca is on the cutting-edge of technology."

### Finding the right products

In the first Endeca deployment phase, a team from Sigma-Aldrich and Endeca implemented Endeca's integrated Guided Navigation and advanced search to meet the main objective: improving search and browsing. The Guided Navigation experience helps users find what they are looking for as well as discover new items they didn't know existed. It presents search results in a context that provides multiple valid browse paths for refining and exploring the data while eliminating dead ends.

This navigation context updates with each click, so that users progressively narrow the search results to find the right product — often discovering alternatives they didn't know existed. Because users can reach the same data via multiple browse paths, they can search intuitively, and search success is more likely.

In addition, Guided Navigation is fully integrated with Endeca's advanced search, to facilitate access to unstructured data. Search



## “Findability — customers’ ability to find what they are looking for — has gone from 53% to 84%.” — Daniel Boesch, Sigma-Aldrich marketing manager

techniques — including spell correction, stemming (for word variations), wild cards (for partial term searches), synonyms, and custom thesauri — bridge users’ terms and unstructured data sources.

### Richer information from multiple sources

In deploying Guided Navigation and search, Sigma-Aldrich achieved another key objective. It integrated three product data sources to provide customers with information to help them understand products. These sources were:

1. The highly structured catalog, an XML extract with all the product information
2. 16,000 documents — all unstructured information — fed from a Lotus Notes database
3. 5,000 static HTML Web pages

“Endeca has an open architecture,” says Boesch. “It was able to accept our data in the format that we wanted to provide.”

This integration was possible because the Endeca Information Transformation Layer transforms and indexes the data from all sources, determining relationships among all the information. Using this, Endeca MDEX™ Engine technology can access structured and unstructured data by multiple valid navigation paths.

The updating capability works offline, with a snapshot of the data, and can be run in parallel for large data sources, allowing for easier — daily or weekly — updates for searching. And the unique index leads to faster searching by the MDEX Engine — decreasing site page load times from 6 to 0.5 seconds.

In addition, the tools provided by Endeca and the dynamic nature of Endeca’s Guided Navigation has considerably decreased the overall maintenance costs of managing Sigma-Aldrich’s large, and growing, product

catalog. New items can be quickly added to the catalog as they are available, and based on the attributes of the product, the Endeca MDEX Engine ensures users will be able to find, and buy, the new product.

Boesch comments, “In the past, our search technology only searched structured content, the product catalog, which is itemized to the last degree. You were only able to find documents if they were linked from a product. Today, with Endeca, we actually search all that content at the same time, and we offer Guided Navigation capabilities for the customer to look at product catalog results and then switch over to results from our Web pages and documents. We also have refinement options on our Guided Navigation categories that allow users to drill down into unstructured content.”

### Dramatic improvements, rapid payback

Endeca has eliminated the search problem for Sigma-Aldrich. “Search on the site has dramatically improved with the Endeca implementation,” says Daniel Boesch. “Findability — customers’ ability to find what they are looking for — has gone from 53% to, recently, 84%. The add-to-cart rate is another proof that customers are successful in finding the right product. It has gone from 1.7% to 5%.”

This search success — plus access to more product information to help users solve problems and find the right products — is also helping sales. Boesch says, “We also see 80% more traffic to the final detail page — the page with all the information about the product. And what’s important, eventually, is the buy rate. There’s been a 75% increase in the conversion rate.” This increase is proof that Endeca provides unparalleled access to the “Long Tail” of Sigma-Aldrich’s catalog, products which, before Endeca, were rarely if ever exposed to customers.

As a result of these improvements, Boesch estimates that Sigma-Aldrich has received a return on its investment — “the whole expense with the project team and the resources” — in under six months.

### Continuing innovation

Sigma-Aldrich currently uses Endeca reporting features to further improve search and sales and plans more aggressive measures in future implementation phases. Now, on a weekly basis it looks at search behavior, such as the keywords people use that aren’t in the data — and adjusts the search mechanisms accordingly.

In the future, Sigma-Aldrich will implement comparison tables and also use the Endeca merchandising module, Content Spotlighting. For example, when an experiment or process requires several Sigma-Aldrich products and a customer searches for one of these, the merchandising module can be tuned by customized business rules to spotlight the related products on screen — to facilitate cross-selling.

“Equally important to us,” according to Boesch, “is to drive our users to problem-solving tools we have on our Web site. We’ll be able to use the Endeca merchandising module to expose this content on our site, drive people to that content on our site, and make them come back for that.”

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