



*"It is clear to us that recommendations powered by the collective experiences of our visitors drive revenue. We are very much a 'long tail' site with a devoted community of hobbyists who clearly are the best source for recommendations—our split testing has proven that."*

—Sebo Dapper

Director of Online Marketing  
Horizon Hobby

Founded in 1985, **Horizon Hobby** is an international marketer and distributor of radio control (RC) cars, boats, planes and helicopters; model railroad; plastic and die-cast models; educational toys; and other general hobby products. With over 80,000 SKUs, 220,000 unique visitors, and 5.5 million pageviews/month, Horizon Hobby is the second largest hobby distributor in the US. The majority of their customer-base is loyal hobbyists who make several purchases each year.

#### GOAL

- Improve conversion rate
- Increase average order value
- Increase product offering awareness

#### SOLUTION

- Baynote Recommendations
- Endeca Search w/Baynote Social Search
- Baynote Insights

#### RESULTS

- 11.6% average order size increase
- 17.6% revenue increase

## CASE STUDY: Horizon Hobby

Prior to the holiday shopping season, Horizon Hobby was looking for a way to improve their conversion rate and increase order sizes. They had been using a homegrown search engine and were looking for a way to make product suggestions, especially for their non-proprietary items. They wished to recommend complementary products, such as motors for planes, as well as offer alternative products for items that contained little detailed information. One of the options considered was to hand-choose accessories for products using the search engine's merchandizing area. With 80,000 products in their database, this would involve a huge amount of time and effort.

In addition, Horizon Hobby wanted to separate their product offerings by major category. These categories include Radio Control, Model Trains, and Play & Learn items. With only one merchandizer who is completely dedicated to Radio Control, they needed a solution to increase order sizes and click rates for Model Trains and Play & Learn. "Baynote has exceeded our expectations and has allowed us to virtually eliminate the need for a merchandizer for two of three major product categories," said Jamie Price, web production manager for Horizon Hobby.

Horizon Hobby decided to change their search engine to Endeca, but still needed a way of automatically merchandizing products throughout the website. They evaluated several alternatives to solve this problem, including rule-based merchandising systems, but quickly realized that a community-driven approach would not only automate the recommendation process but also provide hobbyists the satisfaction that recommendations were coming from the implicit preferences of the like-minded hobbyists.

# Solution



Term	Attempts	Usage Rate
warbirds	7,778	33%
p51 mustang	4,921	43%
monster	3,542	34%
sport	3,391	33%
scale	3,250	29%
single	3,203	43%
aerobatic	3,030	25%
spm air radios	2,471	34%
3d	2,391	21%
4-3-1	1,844	20%

*“One of the greatest things about Baynote is you don’t have to DO much of anything... It works on its own.”*

—Jamie Price  
Web Production Manager  
Horizon Hobby

## Product Recommendations

Horizon Hobby configured Baynote Product Recommendations on individual product pages to cross-sell complementary and alternative items. For example, if a customer were viewing an RC plane, Baynote Recommendations may show spare parts, repair kits, or alternative airplanes. These items typically fall outside the primary display space. Spare parts and repair kits are typically higher-margin items and because they relate directly to the shopper’s current intent, recommending these long tail items increases order size. Recommendations also frequently expose shoppers to more expensive items with the same core appeal, further increasing order size.

The Baynote Collective Intelligence Platform™ also enhances the search results provided by Endeca by adding a human element that understands context better than keyword-driven algorithms. For example, if the customer searches for “blade” they may be looking for X-acto knives, rotor blades, or the “blade” style of helicopter. Baynote uses implicit community behavior to determine what products best match the query “blade” and returns a combination of Blade helicopter kits and replacement parts. The Endeca-driven search returns only a variety of X-acto knives. While the Horizon Hobby merchandizer manually adjusted these results by adding a link to Blade Helicopters in the merchandizing section, it is impossible to do so manually for all queries because of the number and changing nature of queries.

By using Baynote Social Search, each query uses real-time community data to deliver the most appropriate answers, dynamically changing the results as visitors’ preferences shift. Using the Baynote Social Search layer on top of Endeca adds value to an already valuable search. By making the search experience successful, visitors avoid frustration and are more likely to become return shoppers.

## Insights

The marketing team at Horizon Hobby uses Baynote Insights to gain valuable information about the community’s activities and intentions. For example, a report on search terms shows what the site visitors are specifically asking for. This folksonomy is valuable information when buying Google or Yahoo! ads. The team can also see results from A/B split tests, view how well each set of recommendations is performing, and adjust the recommendations according to their own custom merchandizing rules to take into account such factors as margin, inventory levels, and brand.

The marketing team is also taking advantage of Baynote’s merchandising console to manually control the few items that need a human touch, for example blacklisting products for certain searches that could cause copyright infringement issues.

# Results

After deploying Baynote, Horizon Hobby used Baynote’s A/B split testing capabilities to measure impact: where some visitors were exposed to Baynote Recommendations and some were not. The results of this test demonstrated that people who were exposed to Recommendations had a 17.6% increase in their conversion rate and an average order size increase of 11.6%. Horizon Hobby has access to reports that measure the ongoing impact: Baynote has consistently outperformed the control group by double-digits.

Because Baynote complements Horizon Hobby’s site navigation and search engine, all hobbyists—whether experienced or novice—are able to benefit from the knowledge of their peers while searching or navigating throughout the website. Most importantly, Horizon Hobby benefits from automated merchandizing that delivers increased order sizes and higher conversion rates.