

# CASE STUDY

ALGONOMY

swap.com

**SEGMENT** | Apparel

**PRODUCTS** | Algonomy Find™

**CHALLENGE** | With more than 2 million unique SKUs, Swap.com needed to move beyond basic site search to provide 'true personalization' that is instant, individualized, accurate and exceeds shopper expectations.

## RESULTS

Swap.com replaced its existing search functionality with Algonomy Find to connect each individual shopper with more relevant results – in real time:

- **Delivered initial 'out of the box' conversion increase of 7.3% – the biggest conversion increase Swap.com has ever seen as the result of introducing a new tech capability.**
- **Immediately enhanced brand perception & engagement by returning relevant results for queries averaging 2.2 words or less. Provide a better experience to high-value customers (40% of revenue comes from session with search).**
- **The search experience at scale to help Swap.com understand if shoppers are locating the items they wish to buy.**

"Unlike Amazon, we carry an inventory of one. So traditional personalization strategies – customer segments, popular items and past purchases – don't work for our business. We needed true individualization, and Algonomy was the answer."

– Jussi Koskinen, CTO

Swap.com is the largest online consignment and thrift store in America with over 2 million unique items available for purchase. The company was recently named to the Internet Retail Hot 100 List for its unique business model and vision to help customers be environmentally sustainable while saving money on their favorite brands.

## CHALLENGE

Launched in 2013, Swap.com has rapidly become the best place to buy and sell used apparel online. Sellers simply send items to Swap.com, where they are inspected, cleaned, photographed, stored and then added to the Swap.com site. Shoppers receive a discount of up to 90% off full retail prices for like-new items with a full refund policy on par with Amazon.

Swap.com's success depends on scale, and the company has seen explosive growth from 500,000 to over 2 million items in less than 24 months. With 2+ million unique SKUs to manage and promote, Swap.com has found that search is fundamental to a great shopping experience on its site – and even more important on mobile, where the smaller format and screen size leaves far less room for error:

- Shopping sessions that include search convert 50% better than those that don't (and up to 150% better when taking into account customers who bounce).
- Approximately 40% of overall revenue comes from sessions with search.

However, the search terms by themselves do not offer very much insight into a shopper's intent and preferences. Case in point: the average search term on Swap.com is only 2.2 words and top searches include Nike (1), jeans (2) and Under Armour (3).

Before implementing Algonomy Find™, Swap.com decided to augment its existing search solution with browsing behaviors, past purchases, and popularity (i.e. this group of cashmere sweaters gets clicked on the most) to try and deliver more relevant search results. Unfortunately, this combination of history and popularity didn't deliver the 'true personalization' experience that Swap.com envisioned.

"Popularity is not personalization," explains Swap.com CTO Jussi Koskinen. "You can ask a chain restaurant for a wine recommendation, and they will tell you what is the most popular. 90% of time it is the cheapest wine. It might be cheap, and it might even be what other people like me buy, but it is not personalization."

Swap.com needed to provide a compelling mix of focused and diverse results based on similar brands and attributes to encourage shoppers to go deeper and uncover new items – and share their love of the site with others. The stakes were high. A poor site experience not only directly impacts sales, but creates a negative consumer perception of the quality of the Swap.com store and brand.

## SOLUTION

Swap.com defined the characteristics of true personalization that were required to drive its business forward.

- Segmentation is not enough to provide great search results.
- Rules-based personalization (for example, recommend winter items in winter) is useful but not insightful enough.

Swap.com quickly identified that personalized search must be able to learn and evolve. The technology needed to understand the product index to identify the right results, and needed to create a dynamic, user-specific subset based on preferences, behaviors and both meta and individual context (“it is warm all the time in Florida and colder in Alaska”). And it needed to be transparently tested and optimized to accomplish Swap.com’s business goals.

## HOW IT WORKS

Find is the only full stack ecommerce site search solution architected with three layers of personalization that returns dynamic results optimized for each individual. Find applies personalization at indexing, query time and at the dashboard level so shoppers receive more relevant results – all in real-time.

Built on the award-winning Algonomy personalization platform, Find considers user preferences and behavior intent to display the most contextually relevant and personal results for each user’s query – at enterprise scale. Together with Findability, a success metric unique to Find, these elements allow Swap.com to assess customer satisfaction to maximize conversion and revenue.

Find combines the search functionality expected by consumers such as type-ahead, auto-complete and visual shopper queries with predictive intelligence to present and refine results within the search experience.

Swap.com maintains full controls in the dashboard via Stemming, Synonyms, Facet configuration, Linking, and Conditional boosting, and can monitor queries and trends in real time to react when it matters most.

## RESULTS

Algonomy Find has already outperformed Swap.com’s expectations for personalized commerce search. In A/B testing, Find delivered an initial conversion increase of 7.3% over Amazon CloudSearch (based on 30,000 checkouts including only sessions with search). This is the biggest increase Swap.com has ever seen as the results of introducing a new technology.

Koskinen expects this more than double with continued optimization and learning by the Find solution. Swap.com is continually optimizing Find based on several metrics, including Findability, to individualize the customer experience and ensure that search returns are more

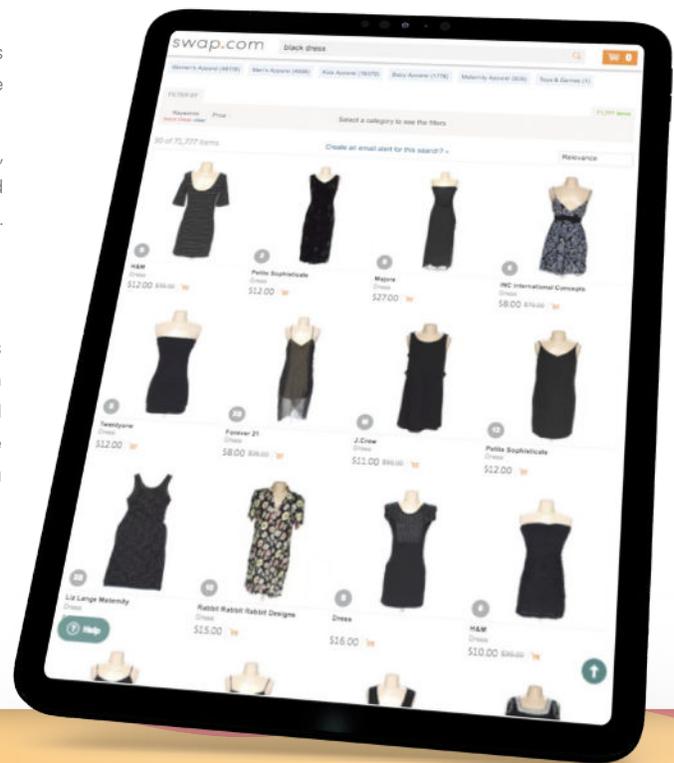
Swap.com evaluated several hosted search solutions before selecting Algonomy Find based on its unmatched personalization technology; advanced merchandising configuration capabilities; strong Natural Language Processing; and proven scale and success at handling large numbers of SKUs.

“Personalization was the #1 reason we switched to Algonomy Find,” Koskinen states. “The scale and precision of the platform is unmatched, and we have the full customization we need for our unique model and customers. The results we’ve seen so far have proven that Algonomy is the best fit for our customers and new shoppers coming to our site.”

Algonomy Find was fully integrated on Swap.com in Spring 2017 using the server-side api. The simple process leveraged existing feeds and profiles from Swap.com’s existing Algonomy personalized browse and navigation implementation.

relevant and intelligent each time a shopper returns to Swa.comp.

“A great search experience simply re-sets customer expectations for the next one. We know that each search experience needs to be better than the last, but finding the right metric to measure this is one of the biggest challenges,” Koskinen explains. “Algonomy’s Findability score shows the overall quality of the search result, making it a perfect metric for optimization. Our path forward is all about measuring success and benchmarking as we continually test against different configurations to bring search to life for our customers.”



# ALGONOMY

Algonomy (previously Manthan-RichRelevance) is a global leader in algorithmic customer engagement powering digital first strategies for retailers and brands. With industry-leading retail expertise connecting demand to supply with a real-time customer data platform as the foundation, Algonomy enables 1:1 omnichannel personalization, customer journey orchestration and customer analytics. Headquartered in San Francisco and Bangalore, our global presence spans over 20 countries. To learn more, please visit [algonomy.com](https://algonomy.com).