Algo Controls

Harnessing customizations to ranking algorithms to provide frictionless customer experiences



Your October 2023 Best Practice Session Hosts

Experience Strategy Group + Digital Experience Management



Kyle Wilson

Principal Experience Strategist
kyle.wilson@bloomreach.com



Carolyn Tran
Digital Experience Manager
carolyn.tran@bloomreach.com

What are Algo Controls?



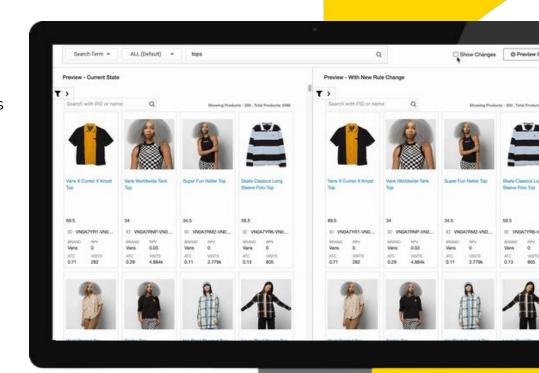
Self-Service Algorithm Controls

OVERVIEW

Empowering teams to configure search algorithms directly on the dashboard and preview the impact of these configurations before going live.

KEY FEATURES

- Configure four Search algorithms:
 - Search Recall Precision
 - Query Relaxation
 - Spell Correct
 - Facet Precision
- Configure at global or query level
- Preview and A/B test configuration changes



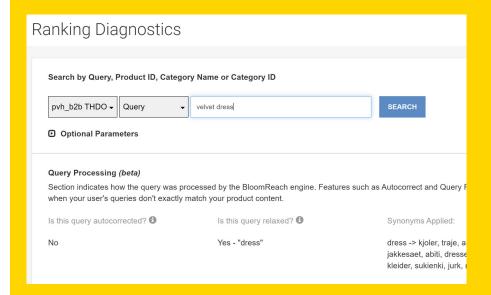
Search Recall Precision

Sometimes search recall can be noisy if product data is noisy. Bloomreach has powerful precision modes that eliminate unrelated products from the search recall. This leads to a more compact, relevant and precise recall set. The below are the precision options available:

Mode	Description	Considerations
Text Match (Default)	Based on basic term match. For example, if a customer searches for 'red dress', this mode retrieves all the products for which there is a match on the term 'red' and the term 'dress' in all searchable fields.	 The recall set may contain noise if the data in your feed is noisy However, relevant products will still be ranked higher in the recall set

Query Relaxation

Is switched on by default for all BR customers. If a query leads to no results, BR relaxes the query by using the identified product type as the mandatory field to find product matches. With algo controls, you can choose to switch off query relaxation globally or on a per query basis



SLOOMREACH

Spell Correct

Spell Correct is triggered when the original query has 0 results and there's a query with similar text that does have results. Spell correct operates using one of two algos: 'closest match' or 'term frequency'.

Term Frequency is the default mode, a term that appears more frequently in your catalog will be considered the optimal spell correction. For example for query 'shrts', if 'shorts' appears more frequently in your catalog than 'shirts', the query will be auto-corrected to shorts.

Closest Match uses edit distance to determine the spell correction. The edit distance between two sets of letters or numbers is the minimum number of edits to get from one term to another. The smaller the edit distance, the more optimal the query. For example, for query 'shooes', 'shoes' is a more optimal query for auto-correction than 'shorts' because it requires just one character to be removed.

Example of Term Frequency vs Closest Match

Query = strapy shoes, term frequency solve = stripe shoes, closest match solve = strappy shoes

Facet Precision

In some instances you may come across irrelevant facets and facet values being displayed in the search results. This can happen when your product data is noisy or when you have noisy fields marked as searchable.

Facet precision helps clean up potentially irrelevant facets tied to products buried far down in the search results.

This feature can lead to less manual work as it reduces the need to create facet rules as it cleans up irrelevant facets automatically.

How does this feature work - The most relevant facets and facet values are determined based on the products in the dominant categories for the query. Dominant categories are determined based on the top 50 products in the recall set for the query. For example, for the search query 'dress' the top 50 products might be products assigned to categories like cocktail dresses, evening dresses etc much further down the recall set there may be 'dress shoes'. As such, facets/facet values for 'mens shoes' would be removed.

Let's see what the dashboard looks like

Best practices and key considerations

#1: Consider if Algo Controls are truly needed for your business

Unlike traditional keyword search engines, Bloomreach search is enhanced with semantic understanding. These semantic-powered algorithms provide better ranking than other engines.

Product types and attributes are recognized for each query. Because of this, products which match product intent in a query are given a higher rank leading to more relevant results.



Bloomreach understands that shirt dress and dress shirt are different products. A traditional keyword search engine would not understand the difference.

#2: Wade into what you're solving for

Use query-based overrides to preview before applying globally

1. Challenge: Your descriptions create noise in the recall set.

(ex: sweater showing when you search for boots, because it has "great paired with boots" in the copy)

2. Challenge: Your products fall into many categories; you want to narrow the recall down to the dominant category.

(ex. "baskets" live in Home, Kitchen, and Bedroom, but Home is the top selling, dominant category: it will only show the baskets within Home)

Goal: Reduce Noise of Irrelevant Results

Goal: Narrow product type to top category

Product Type Precision Mode

Category
Precision Mode

#2: Wade into what you're solving for

Use query-based overrides to preview before applying globally

3. Challenge: If your customers search by collections and you want their experience to show exactly or null results.

(ex. Kathy sweater, Cloud sectional)

4. Challenge: If your customers search by collections or brands and you want the exact experience or null searches. Potential contract agreement with luxury brands.

(ex: Gucci, Dior, etc.)

5. Challenge: If the facets returned contain irrelevant results due to your searchable and facetable fields, and you want the results narrowed down.

(ex: 'bed' returns facets for beds, blankets, beddina)

Prioritize accuracy, with higher null results

Prioritize accuracy, with higher null results

Reduce noise in Facets

Query Relaxation: Off

Spell Correct: Off

Facet Precision: High

#3: Work with your Bloomreach Team to assess if Algo Controls are right for your business.

We're better together!





Thank You!





Keep the conversation going... join the Bloomreach Slack Community!

- Stay up-to-date on all things monthly Best Practices and access resources related to our session topics by adding yourself to the #discovery-best-practices channel
- Network and share ideas with fellow Bloomreach customers
- Hear the latest news from Bloomreach and stay informed about industry trends

→ Link to join



Let's keep the conversation going!

- 1. Join the Digital Merchandising Community on Linkedin
- 2. Invite a friend..OR two to join the community and the events
- 3. If you are interested in being apart of a future panel, we would love to have you join one!

