Personalized Search Overview

> Contact your dedicated Customer Success Manager (CSM) if you want to add any of Monetate's Personalized Search features to your account.

Monetate's Personalized Search features use your customers' behavior on your site and other context to show auto-completed search terms and products as the customer is typing their query; to personalize full search results after the customer enters their full query; and to personalize the products displayed on category pages. These features, which work in any channel, combine large language models, natural language processing, and your own merchandising rules with many of the same functionalities that power Monetate's Product Recommendations and Dynamic Bundles offerings. Semantic enrichment automatically adds synonyms, adjusts for plural forms, and normalizes product data, such as colors and sizes. The result is a more relevant, targeted, and optimized search experience for your customers.

Personalized Search consists of two primary components that you can add to your existing Monetate implementation either separately or as a package: Personalized Site Search and Personalized Category Pages.

Although Personalized Search is a RESTful API, you can use its features even if you have a Monetate JavaScript API implementation (also known as a Monetate tag implementation). You must have your own development resources to implement it. You can review the Personalized Search API documentation in the Monetate Developer Hub.

Personalized Site Search

The settings and options that you can configure for Personalized Site Search not only enhance customers' ability to find the products they're looking for on your site, but they also enhance your ability to show off products that customers may not realize they're looking for.

Returning results for a search is more than just matching the words in a search query to words in a product's name or description. Personalized Site Search allows you to boost or bury individual products as well as products that share values for attributes in a product catalog dataset. You can promote products at the top of the results using pinning rules, and you can exclude products from results entirely.

Many of the attributes found in your selected product catalog dataset you can display as filters on your site for customers to use to narrow search results.

Furthermore, customers who use your site search to find specific pages of your site—returns policy, sizing information, seasonal content, and more—will also find what they're looking for when you configure URL redirects.

Finally, when you're ready to deploy a Personalized Site Search experience, you pair it with a recommendation strategy. The strategy's configuration joined with Personalized Site Search configurations lead to relevant, personalized, contextual, optimized search results.

Not only can you view analytics for these Personalized Site Search experiences, you can also view analytics for search queries, search users, and other metrics.

Personalized Category Pages

The settings and options that you can configure for Personalized Category Pages allow you to adjust the ranking order of products on product list pages with boost and bury rules, as well as pin products and exclude products from the list pages.

When you deploy a Personalized Category Pages experience, you use the same action template in an Omnichannel experience that you use for a Personalized Site Search experience. The configuration of the recommendation strategy that you select for the action along with the settings you've configured for Personalized Category Pages lead to personalized, contextually relevant category pages.

Just like Personalized Site Search, many of the attributes in your selected product catalog dataset you can display as filters on your site so that customers can then apply them to narrow the scope of products displayed on the product list pages. Not only can you select which filters you want displayed, but you can also set their order or opt to allow machine learning to continuously optimize their order.

Analytics are available so that you can see how the default rules impact category views, product views, and sales from sessions that originated from category pages.

Preparing a Product Catalog for Personalized Search

The product catalog dataset that you select for use with one or both Personalized Search features should be optimized to best serve the capabilities available. Not only should you ensure that the product catalog adheres to Monetate's product catalog dataset specification, but you should also be aware that specific attributes and their values have requirements that are *in addition to* the requirements established in the specification. The following table contains those additional requirements.

> Your dedicated Customer Success Manager (CSM) will assess your product catalog dataset and alert you to specific modifications required as part of the Personalized Search onboarding process.

> You can only include multiple values in an escaped comma-separated string for the `product_type` attribute. Including multiple values in a comma-separated string for any other attribute in the product catalog—including custom attributes—that you select for use with Personalized Search causes it to fail validation for this feature.

Attribute	Description
`title`	A product's name is limited to 150 characters and is truncated if the value exceeds this limit.
`image_link`	The URL for a product's main image cannot exceed 2,000 characters.
`link`	The URL for a product's detail page cannot exceed 2,000 characters.

Attribute	Description
description	Ensure that each value accurately describes the product and is not placeholder text. The character limit is 5,000, and is truncated if the value exceeds this limit.
price	The format must be [0-9].[two decimal places] (for example, 12000.00).
product_type	Use only a greater-than symbol (>) to indicate the hierarchy of the full path of a category to which a product belongs. Each segment of the string can't exceed 100 characters, and the full string cannot exceed 750 characters.
availability	The value for this attribute can only be [Ii]n [Ss]tock or [Oo]ut of [Ss]tock. **This attribute is required for Personalized Search.**
additional_image_link	The URL for an additional product image cannot exceed 2,000 characters.
age_group	The character limit is 200, and is truncated if the value exceeds this limit.
brand	The character limit is 200, and is truncated if the value exceeds this limit.
color	The character limit is 200, and is truncated if the value exceeds this limit.
condition	The character limit is 200, and is truncated if the value exceeds this limit.
gender	The character limit is 200, and is truncated if the value exceeds this limit.
material	The character limit is 200, and is truncated if the value exceeds this limit.
rating	The format must be [0-5].[one decimal place] (for example, 4.9).
sale_price	The format must be [0-9].[two decimal places] (for example, 12000.00).
size	The character limit is 200, and is truncated if the value exceeds this limit.

Keep in mind these best practices as you prepare a product catalog dataset for mapping with Personalized Search.

Title

Ensure to include the main product noun (for example, *coat*, *lamp*) in the title value so that natural language processing can more readily understand the object the title identifies. Personalized Search identifies the main product noun from every title value and prioritizes relevant products when customers search for the respective product noun.

Avoid including unnecessary information such as technical specifications or additional parts in the title value. The title should first and foremost identify what the product is (for example, Men's Wool Sweater or 32-inch LED Monitor). Move supplementary details to their respective attributes (for example, color).

Description

Descriptions should complement—not replace—the product information in the title and other supplemental attributes, such as size and color. The description is the attribute where you can provide details such as potential use cases and suitability criteria.

Use natural, clear language when writing descriptions, and avoid incomplete sentences, which can impact relevance

scores.

Size

Although Personalized Search can normalize size information, such as equating *S* with *small* and *M* with *medium*, use consistent values for this attribute throughout the product catalog when possible. For example, avoid using S for some products but using small for others.