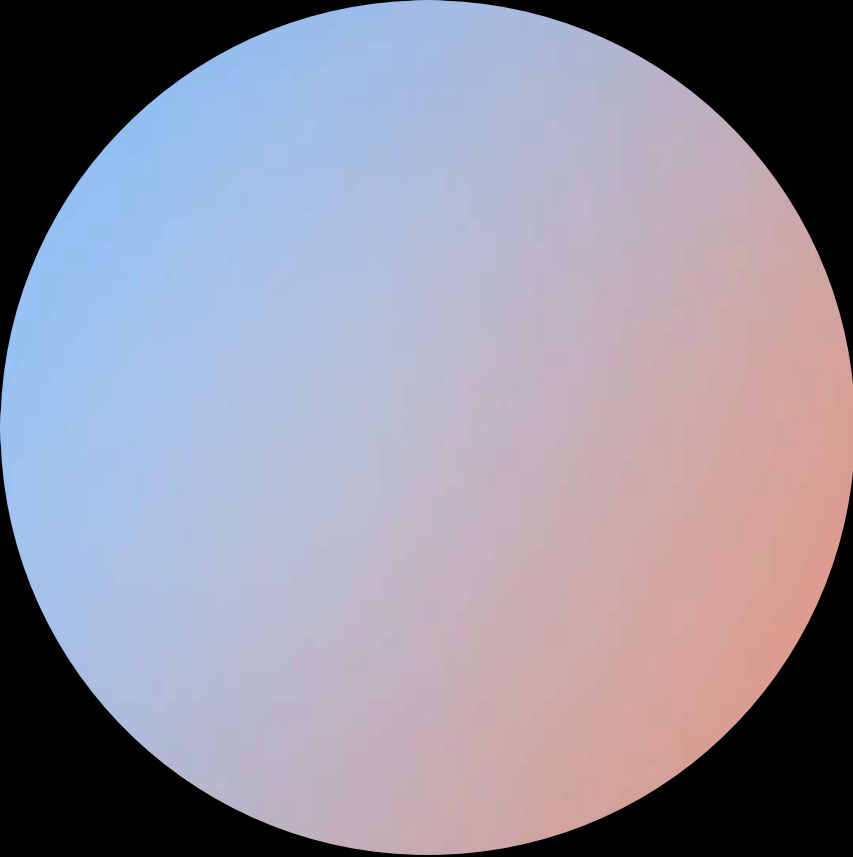


The Ultimate Guide to Searchandising with Constructor



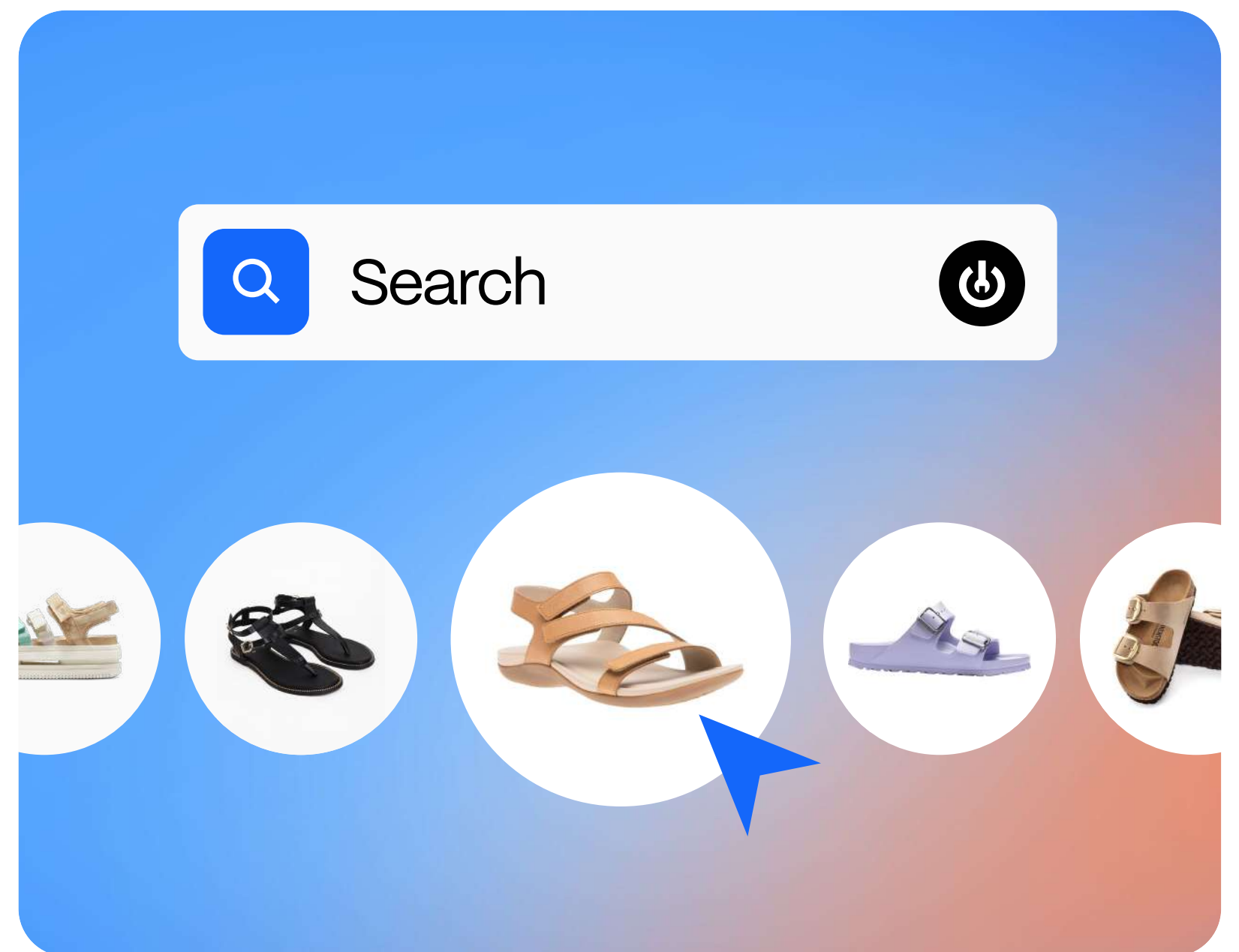
Ecommerce merchandisers are a retailer's connection to the online customer.

No other role is more dedicated to crafting an unforgettable ecommerce experience, ensuring that shoppers can find desired products. Merchandisers juggle a variety of tasks to create a seamless retail experience across the customer journey — from creating visual assets and product copy to managing facets, handling linking strategies, and highlighting new and bestselling items. It's a lot to balance.



A product discovery platform like Constructor can help alleviate some of the headaches caused by repetition of manual tasks your team performs daily. Our Native Commerce Core™ leverages artificial intelligence (AI) together with behavioral data to automatically personalize product rankings on a user-level and optimized against business KPIs. This frees your ecommerce team to do what they do best: find new, creative ways to reach customers and create delightful site experiences.

In order to trust a product discovery platform, merchandisers need to do two things: understand how and why the AI is working to rank products or surface search results, and manually intervene when they see an opportunity to improve outcomes.



With Constructor, companies can do both.

Because we know that merchandising plays a key strategic role in product search and discovery, Constructor provides you with world-class merchant controls to meet your business goals and fully optimize the customer journey.

In this guide, we'll dive into two areas where Constructor streamlines and improves workstreams for merchant teams:

- Site search and browse capabilities (page 3)
- Sitewide product discovery (page 16)

Site Search and Browse Capabilities

The relationship between AI and merchandising isn't contradictory — it's complementary. Constructor was built with the sole intention not to replace merchandisers, but to empower them to work more effectively.

To support this goal, we offer a number of key site search and browse capabilities:

- ✓ Synonyms
- ✓ Redirects
- ✓ Searchandising (Boosting, Burying, Slotting, and Blocklisting)
- ✓ Facet Management
- ✓ Merchant Intelligence (Analytics and Insights)



On top of this, Constructor offers robust spell correction, typo tolerance, and searchability functionality, which allows you to fine-tune recall by configuring which product data is searchable.

Combining these capabilities with our industry-leading AI consistently drives outsized results for our customers, including gains across the board in ecommerce KPIs like revenue, margin, and conversion rate.

Let's dive a little deeper into each of these capabilities.

Synonyms

Synonym Capabilities

One-way synonyms

Two-way synonyms

⚡ AI-generated synonyms with manual override

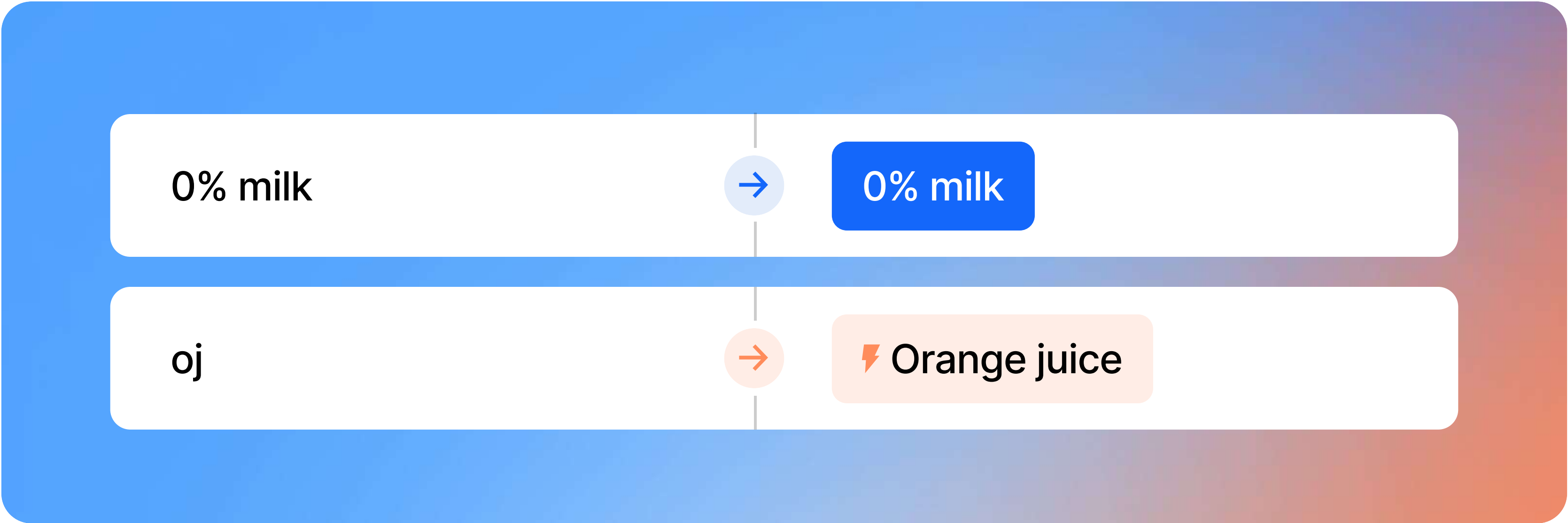
Synonyms are table stakes for any search engine platform. A critical capability for merchandising teams, synonyms are important because they offer a flexible opportunity to address gaps within a search experience.

Use cases for synonyms might include creating synonymous pairings of words (couch and sofa); localizing ecommerce language (wellies for rain boots); or filling gaps in spell correction, typo tolerance, and tokenization.

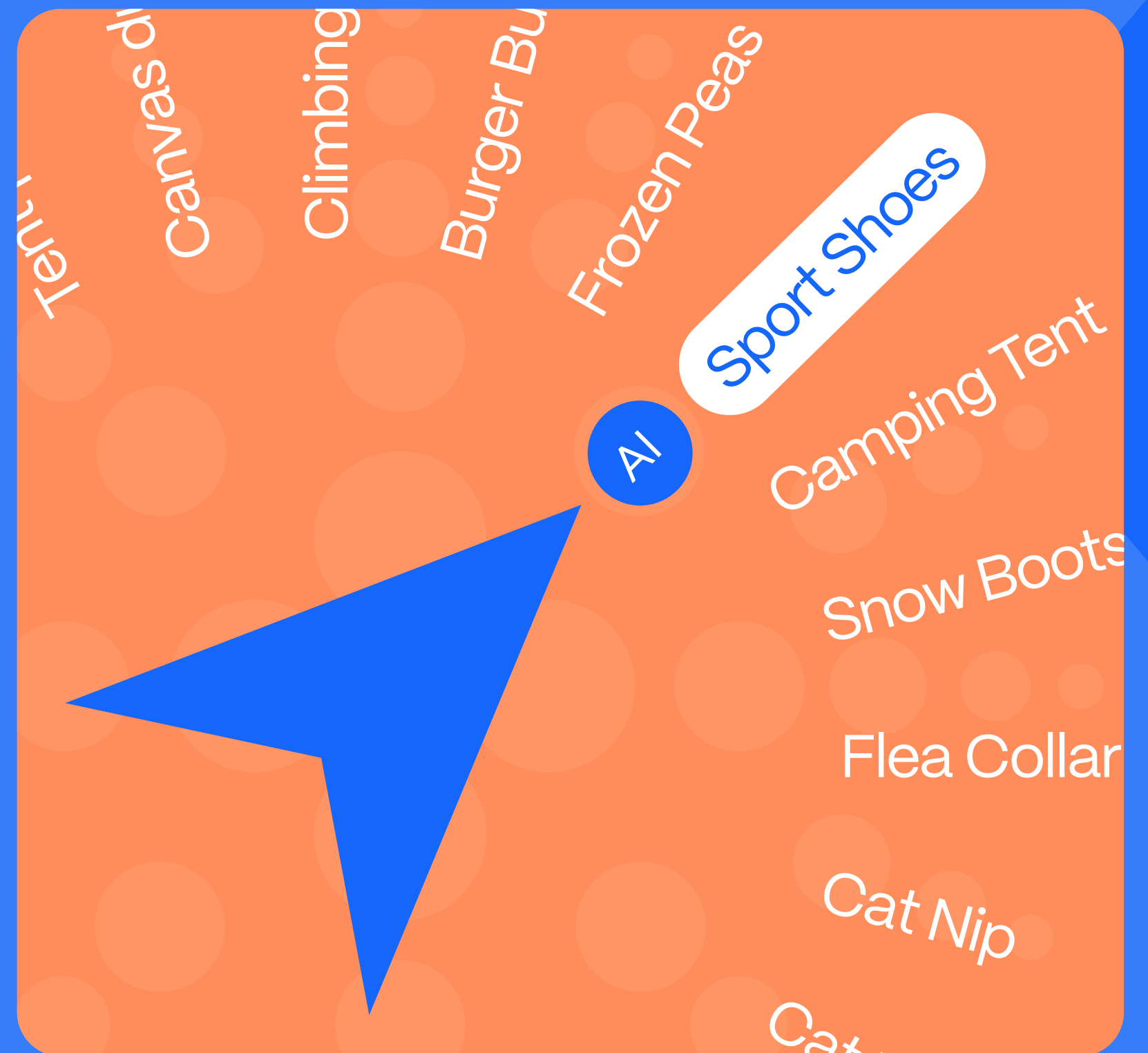
Constructor supports both one-way and two-way synonyms as well as AI-generated synonyms. AI can automatically generate synonyms based on customer behavior, an otherwise manual task to improve the search experience.

To provide transparency and control to merchandising teams, automatically generated synonyms appear alongside manually created ones in the Constructor dashboard. If you don't agree with an AI-generated synonym, no problem: you can delete it, and the AI won't create it again.

We find that merchandising teams using Constructor generally need to create fewer synonyms. Because the platform leverages advanced machine learning (ML) algorithms and natural language processing (NLP), the system infers meanings to detect and generate synonyms more quickly and accurately. The synonyms your team does create will add additional value to the search experience rather than serving as a bandaid fix for a poor search engine.



How Clickstream Data, Transformers, and LLMs Improve Search Results



Clickstream data is the trail of your customers' activity on your website, from the time they enter to the time they leave. Each interaction during their session is recorded and stored in the clickstream — anonymously.

Clickstream data can be used to discover a wide variety of important information, including but not limited to:

- ✔ Which pages shoppers visit first
- ✔ What search terms they use
- ✔ What products visitors click on (or don't)
- ✔ What products visitors add to or remove from their cart
- ✔ What products visitors finally convert on

Transformers (or the "t" in ChatGPT) are the cherry on top. These advanced algorithmic models are trained on large ecommerce data sets and are used to process complex natural language search queries better (for example, "find me hiking boots under \$150 that come in women's size 8").

They're also used to train large language models (LLMs). Constructor is constantly testing new ways to incorporate LLMs into our product, most recently using them to improve how Constructor filters irrelevant results.

In sum, these emerging technologies return more attractive and personalized results across search and product discovery tools, creating deep understanding of a query in the context of clickstream. These findings have been validated by significant A/B test wins.

We're leading the way in showing how AI makes it possible for merchandisers to surface key insights, make more strategic decisions, and enable personalized experiences at a scale across their ecommerce site.

Redirects

Redirect Capabilities

Full-function redirects

Match criteria

Scheduled redirects

Redirects are another core function of any ecommerce search platform. Their primary use is to redirect customers to the most appropriate experience, which is sometimes outside of the search or browse journey all together.

For example, customers looking for "returns" or "store hours" in your search bar aren't searching for products. Redirects ensure that no matter their needs, you can help them find what they're looking for.

In addition to classic redirect functionality, Constructor allows merchandisers to have more control over the entire redirect experience. For example, your team can set match criteria (exact, phrase, or unordered) so that they can spend less time setting up all the possible

variations of how your customers might search for your returns policy (is it return policy, policy for returns, or returns?).

Constructor also allows you to define redirects for a specified period of time. Maybe you want to direct your enthusiastic early "black friday" searches to an experience that lets shoppers know when the sale starts or what they can expect on sale day. But once the event starts, you'll want those queries to return search results as normal or go to a sale-optimized landing page.

Scheduled redirects allow you to configure that experience ahead of time so your team can focus on more important activities when Black Friday begins.

MATCH CRITERIA

phrase

The exact phrase needs to be found somewhere in the user's search.

A "return policy" rule would match when users search for "holiday returns policy" but not "policy for holiday returns".

exact

All keywords need to match the user query exactly.

A "return policy" rule would match only searches for "returns" and not "returns policy".

Searchandising

Searchandising

Boosting, burying, slotting, and blocklisting: globally or by category, collection, or search term

⚡ AI-assisted boosting and burying based on clickstream dat

At Constructor, searchandising (or search merchandising) is at the core of our merchandising capabilities. It's derived from the word 'merchandising' in retail and involves creating a personalized customer experience based on rules across your site: search, browse, recommendations, collections, campaigns, and more.

We'll cover two pairs of rules when optimizing results: boosting/burying and slotting/blocklisting.

Boosting and burying

Constructor supports boosting and burying products based on an attribute or set of attributes, which will then be factored into the ranking of the overall result set. For example, you can bury products that are out of stock or you can boost products that are on sale. These can be done globally, by category, collection, or by search term.

RERANK

↑

BOOST

BOOST SEARCH RESULTS

>

↓

BURY

BURY SEARCH RESULTS

>

🔒

SLOTING

RANK AND FORCE ITEM POSITION

>

REMOVE

🚫

BLOCKLIST

REMOVE SEARCH RESULTS

>

MANUAL

AUTOMATIC (5)

GROUP ATTRACTIVENESS RULES

↓

MODERATE BURY

🗑️

Category (1)

All / Canned Goods & Soups

👁️

↓

MODERATE BURY

🗑️

Category (1)

All / Beverages

👁️

With Constructor, you'll also get boosting and burying help from the AI. Applying machine learning to the clickstream data we collect, Constructor's algorithm fine tunes the results for a personalized experience on top of the boost and bury rules you've already specified. This allows you to optimize the experience for customers and for your KPIs.

And as with synonyms, you'll be able to see in our dashboard exactly which optimizations the AI makes and why.

Slotting and blocklisting

Slotting and blocklisting are more definitive options in your toolkit that give you even more control over the search and browse experience.

Slotting allows you to set rules to place products at specific spots in the results by search query, category, or collection. Say you want to ensure a new gaming console appears in the first slot of the results page the moment it's live on your site. Slotting will allow you to do that.

Alternatively, blocklisting allows you to completely remove products from the result set globally or by search query, category, or collection. This can be useful in situations where a product goes live on the site before the intended time, or you need to remove an overselling product ASAP to minimize impact. Blocklisting it removes the product from your site but retains it in your catalog.



Facet Management

Facet Management Capabilities

Global facet configurations: slotting, merging, expanding, collapsing, hiding, and protecting rules

Contextual, dynamic facet configurations

 AI-assisted facet ordering based on attractiveness and coverage

Global facet management

Facets are a key part of your product discovery experience on-site because they allow users to further refine their results within a given category or search and find the right product.

Global facet management

At Constructor, we understand that you often need to create a consistent facet experience across your site. Our global facet configurations allow you to deliver that experience in a number of ways:

→ Facet slotting

Within our global facet configurations, you have the ability to slot facets in specific positions (i.e., slotting the "Brand" facet at the top of the facet groups).

→ Merging facet options

This feature allows merchandisers to control which facets are best displayed more granularly and which facets are best consolidated. For example, for a color facet group with options of "sky blue," "navy blue," "baby blue," and "galaxy blue," you can merge them all into one "blue" facet option.

→ Expanding facets

The number of facets can become unwieldy when handling complex product categories. Merchandisers can be selective of which facet groups to expand and which to collapse for a cleaner look. Best practice is to expand only the most relevant facet groups for the search query or category page.

→ Collapsing facets

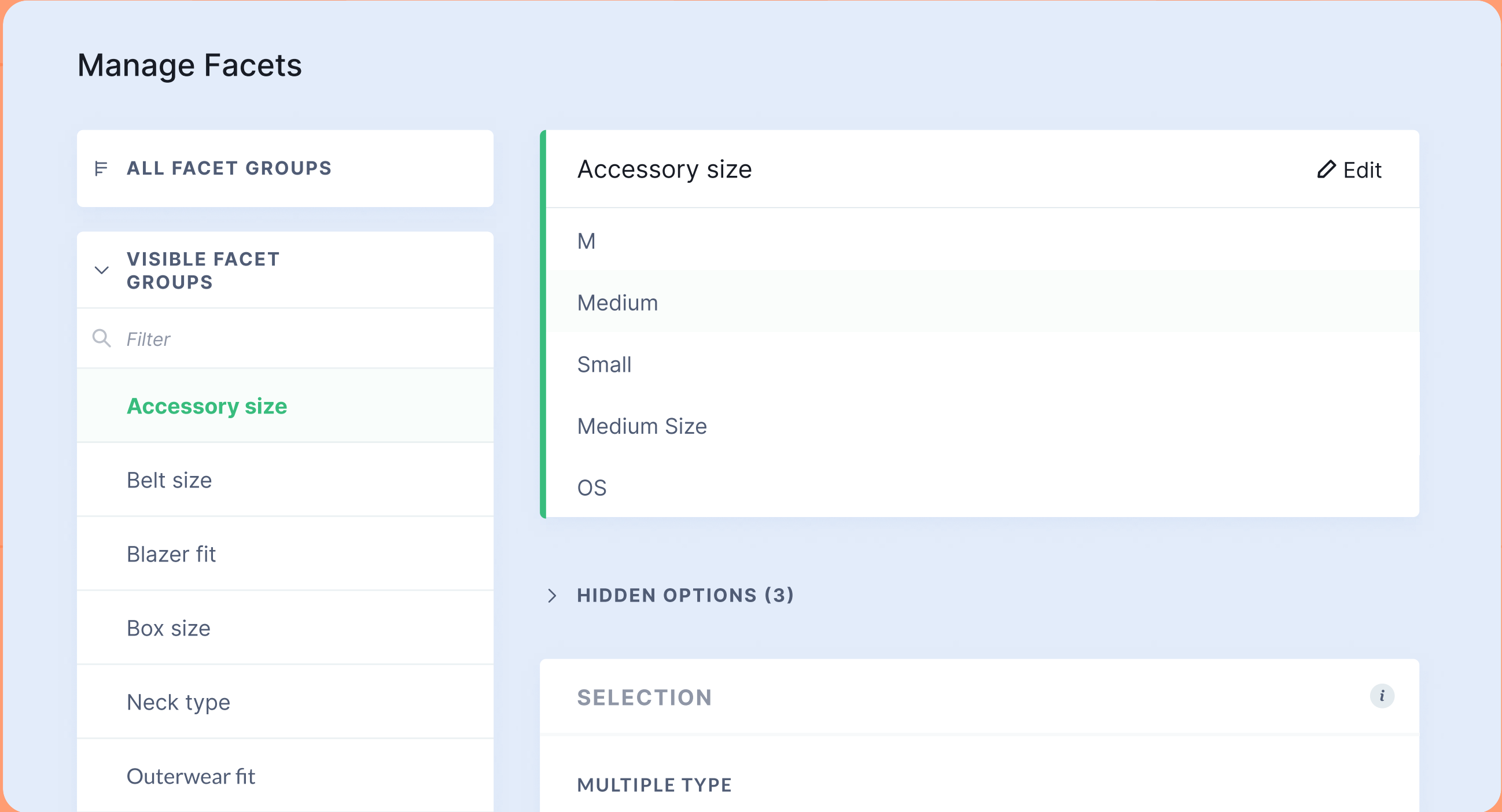
As aforementioned, it's best to collapse most facets. This allows customers to easily see all their options and choose the ones they'd like to expand for more details. (Your mobile experience should also default to collapsed to optimize for small screen space.)

→ Hiding facets

Hiding facets is useful in situations where you want to be able to searchandise against an attribute without externally surfacing that attribute as a facet option to customers. For example, hiding a facet attribute for inventory allows you to bury products with low or no inventory, and customers can't filter for those products.

→ Protecting facets

Unlike hidden facets, protected facets not only remain concealed from customer-facing search or category pages, but also go a step further by concealing the associated data in the API response. This can come in handy for facet groups such as margin, velocity rate, and weeks of coverage.



Managing facets for contextual relevance

You may want to set more contextually relevant facets for a given experience.

For example, you can hide the “Recommended Use” facet on a “Hiking” category page since site visitors already know the product results set is for hiking.

Or perhaps “Size” is generally important across your site. So, it has a default position high in the facet listing. But for categories like accessories where most items are one-size-fits-all, you could slot “Size” below more relevant facet groups like color, brand, or price. It will still be present for that category, but it won’t take up valuable digital real estate for more contextually relevant options.

Luckily, merchandisers don’t have to go it alone. Constructor’s AI-powered systems complement merchandisers’ efforts in making the best facet management decisions.

First, the platform only returns facets that match the products in the result set. In other words, facets presented are those proven to aid users in filtering out products.

Also, after setting global facet configurations (like slotting or hiding), Constructor reorders facets based on a few factors: the attractiveness of the products those facet values are associated with and the coverage that a given attribute has across the result set.

A product with a rare attribute might rank high due to attractiveness, but its facet value might not rank as high with that rare attribute. All of these factors are automatically taken into account when determining how to order facets and optimize for business KPIs.

Merchant Intelligence

Merchant Intelligence Capabilities

- A/B testing
- Rule Performance dashboard add-on
- Slotting rule review prompts
- ⚡ AI-recommended optimizations

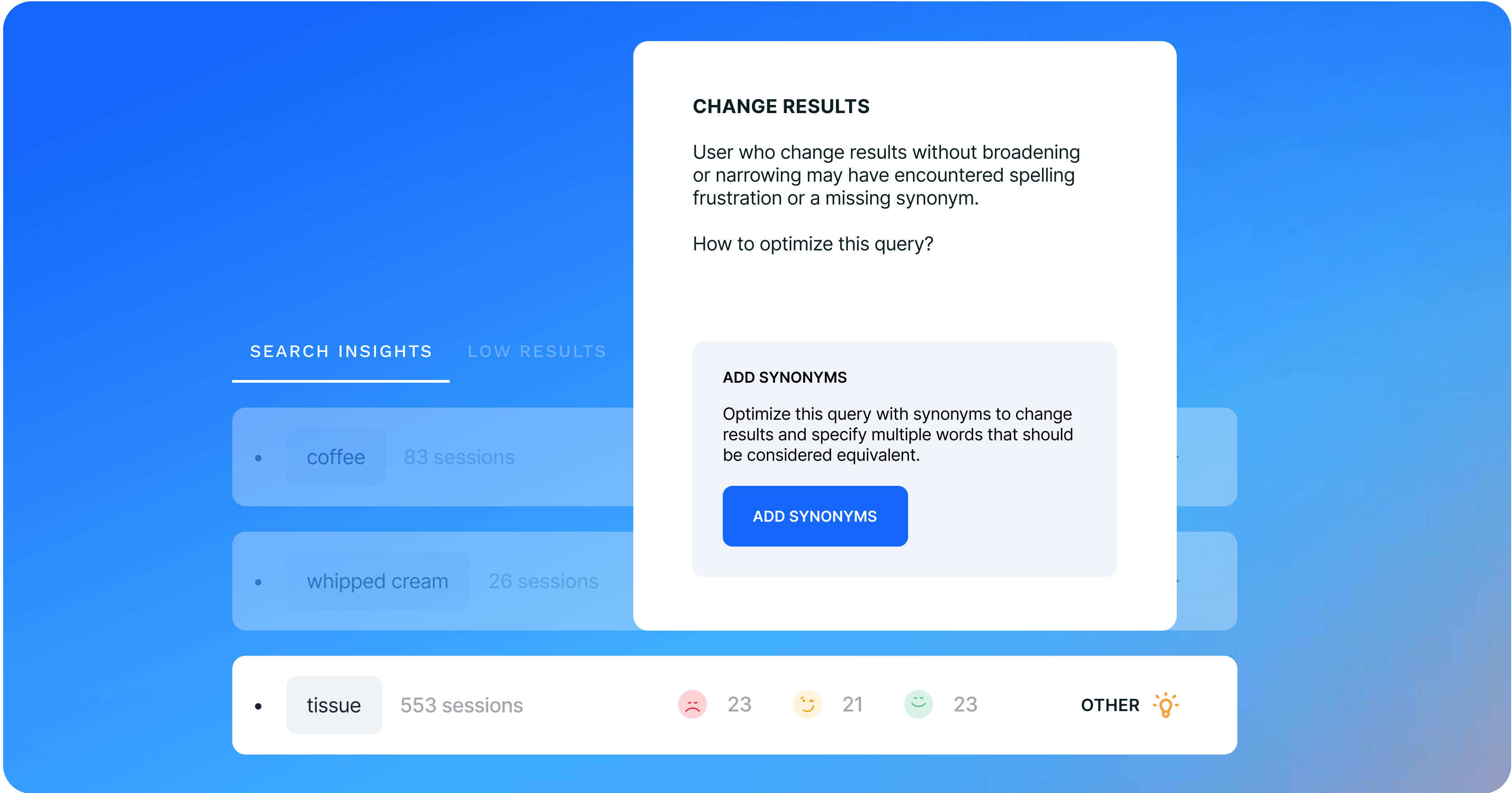
We understand that merchandisers aren't data scientists. It can be cumbersome and time-consuming to set up and run A/B tests on third-party platforms, then interpret the results properly in a way that optimizes key metrics.

That's why we provide AI-driven predictive analytics and actionable insights specific to product discovery right within our dashboard: Merchant Intelligence.

With Merchant Intelligence, merchandisers can A/B test global search and browse rules concurrently. Each test's performance can be monitored via our dashboard, and users can

decide when to stop the test or perform follow-up actions — all based on the positive or negative impact they see the rules are having on their business.

Merchant Intelligence also includes Rule Performance, which provides analytical data outside of a test to help users understand how slotted positions on various pages are performing compared to when they were not slotted. (This is in addition to data currently provided within our Merchant Tools dashboard on search reformulations, null results, trending searches, category page performance, and facet usage metrics.)

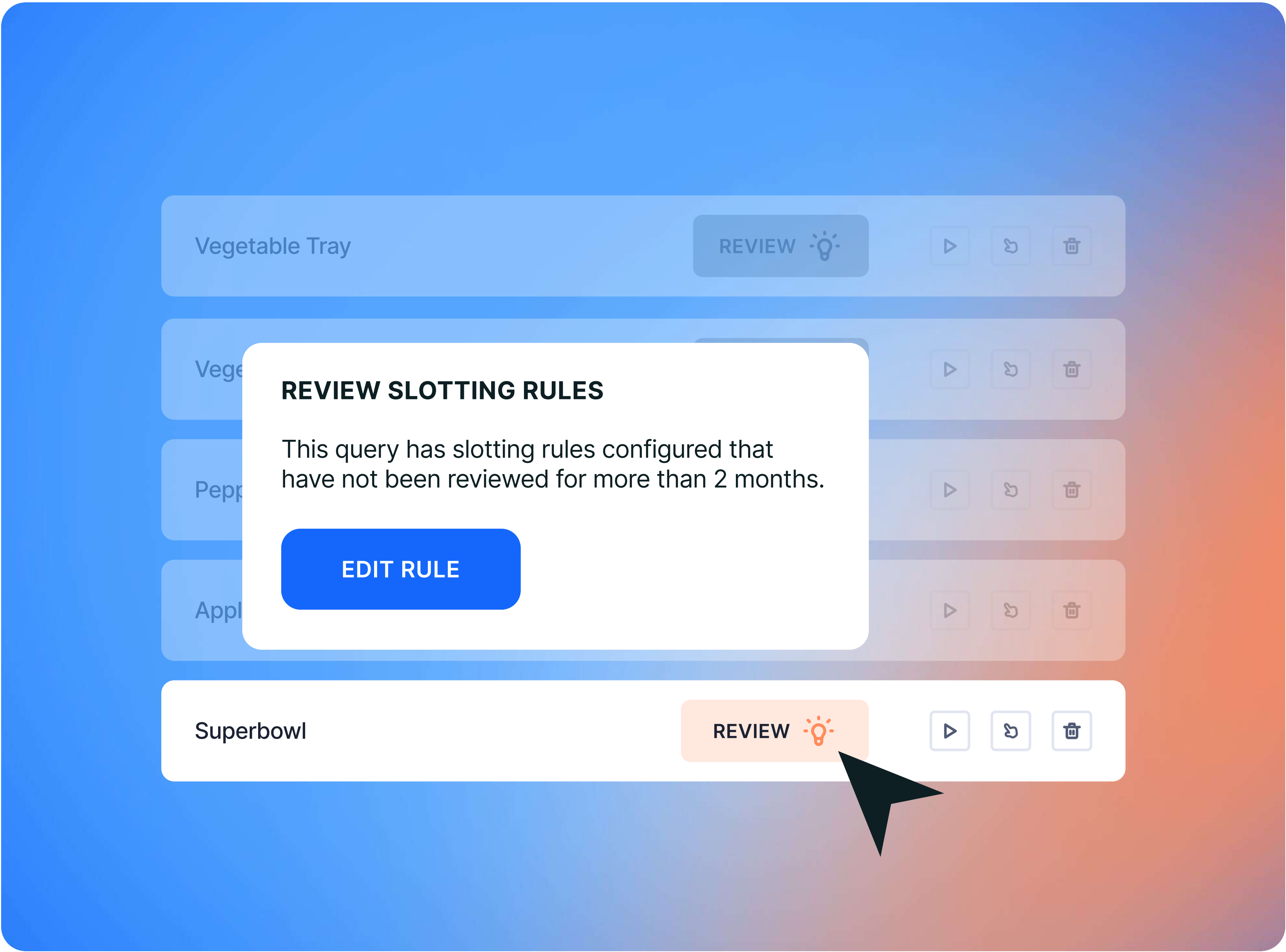


Plus, Merchant Intelligence helps merchandisers better understand the impact of the activities they layer on top of the AI. For example, stale slotting rules can unintentionally impact performance as customer behavior and your product catalog change over time.

Constructor flags potentially stale slotting rules in the dashboard, prompting you for review after a given time period. Our AI also identifies if a slotted product is over- or underperforming based on what you could otherwise expect to see from a different item in its placement.

The overall goal with Merchant Intelligence is not to simply hand merchandisers results, but to provide suggestions on next steps and actions to take. This allows them to have a more guided experience versus other testing platforms.

At Constructor, we're committed to providing merchandisers the right tools and features to prove their actions are driving positive results, reduce operational overhead, and inform strategic decision making. All this combined allows ecommerce teams to serve up delightful search experiences with attractive results for their customers.



Ecommerce Teams and AI: Better Together

People often think AI and merchandising are at two different ends of the product discovery management spectrum: you either heavily merchandise or you solely rely on AI. There is no in between.

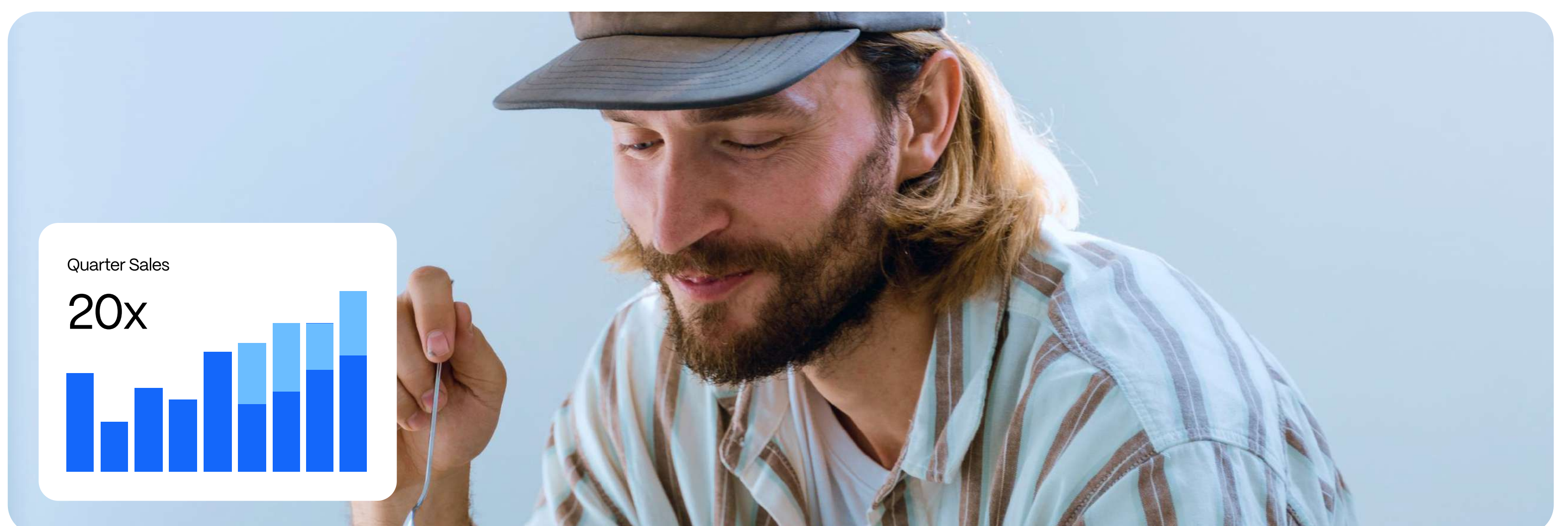
At Constructor, we see it differently. Ecommerce teams and AI can form a powerful partnership,

but that partnership has to be transparent and flexible.

That's why we take a "glass-box" approach to our AI implementation, allowing you to see exactly how it works to impact results. That visibility is critical to blending expertise and technology to drive business outcomes.

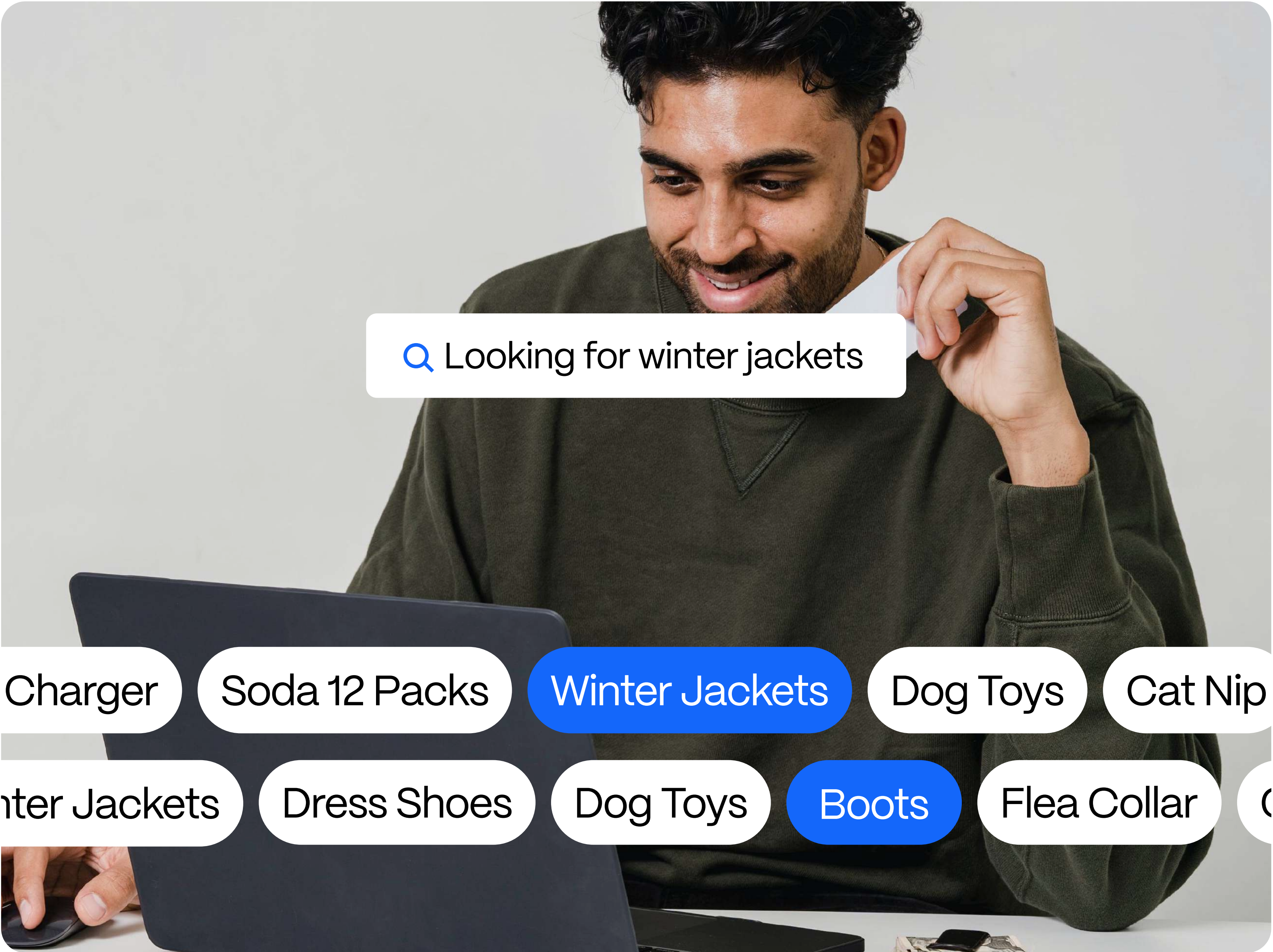
Take any number of situations ecommerce teams encounter on a daily basis:

- ✓ You might be launching a brand new product and want to ensure it has premium placement.
- ✓ You might be running a campaign with a vendor partner and want to boost their products for certain categories or search terms to ensure they get a certain amount of exposure.
- ✓ You might want to bury low inventory products sitewide but then shift your strategy to boosting them and selling through when you find that a certain SKU will not be replenished.



These are all examples of “managing by exception,” where merchandisers focus their attention and resources on addressing situations that deviate from the expected or standard operating conditions. In other words, instead of monitoring every aspect of searchandising, managing by exception allows merchandisers to bring their specific expertise to strategic initiatives like product launches or partnerships — not spread themselves thin across all areas.

In this next section, we’ll dive into a few more ways that Constructor enables merchandisers to leverage their expertise and creativity to craft personalized, unique site experiences that drive business results.



Sitewide Product Discovery

Search and browse are key elements of product discovery, but they're not the only ones. Providing a consistently personalized experience for your customers sometimes requires teams to “think outside the [search] box”:

- ✔ What if products need to be grouped outside of their typical category structure, like for a holiday-themed “gift guide” landing page?
- ✔ How do you provide personalized recommendations on product pages to drive upsells and raise revenue per visitor (RPV)?
- ✔ How do you sell products that require a degree of customer guidance to purchase online, such as cosmetics or specialized technical products?
- ✔ How do you enrich incomplete product data in a way that doesn't require manual tagging and logging through disparate sources?



Search by Context

These are all situations that merchandising teams also encounter with some regularity, and in the past those use cases have required manual, duct-tape solutions.

Not anymore. Because Constructor's Native Commerce Core™ is purpose-built for ecommerce, our platform meets the ever-evolving needs of merchandisers across the entire site, allowing them to create delightful product discovery experiences that drive ecommerce KPIs.

In addition to search and browse, Constructor's proprietary core powers each and every solution we offer:

- **Collections**
- **Recommendations**
- **Quizzes**
- **Attribute Enrichment**



And because every customer interaction is collected in clickstream (which subsequently trains the transformers), our system is constantly optimizing product result sets across solutions.

Sounds promising? Here's how your team can benefit from a holistic product discovery solution.

Collections

Collections Capabilities

Build landing pages based on attributes, static product lists, or both

Compatible with searchandising rules

⚡ AI-powered personalization and reranking to optimize for KPIs

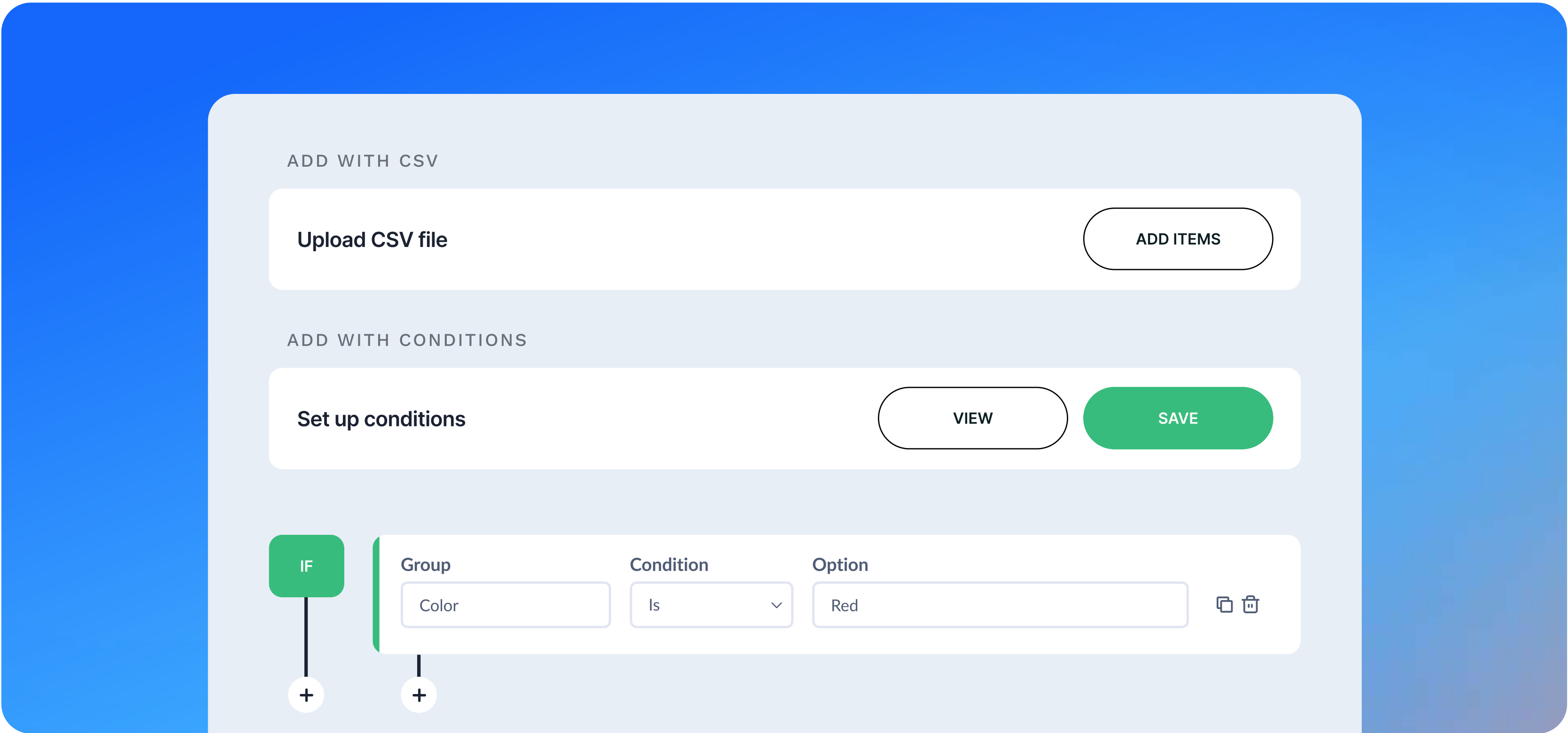
For collections of products like hiking boots under \$200 or holiday clearance items, merchandising teams rely on landing pages.

Ecommerce merchandisers often need to create dynamic landing pages that might not align with an existing category or a single search experience. A landing page can pull in a more granular subset of products from a given category or products that share an attribute across multiple categories. You might even want to curate a collection of products without any shared attributes to drive a certain experience.

Collections supports all of these use cases.

Collections allows you to build out landing pages independently of their existing category structure and populate them with attribute-based logic (for example, category is "Hiking Boots" and price is "under \$200"), a set list of products, or a mix of both to support any experience you're looking to build.

And because Collections benefit from the same industry-leading AI as Constructor's search and browse functionality, result rankings change dynamically based on user clickstream data. Your team also has the ability to manually searchandise them with boosting/burying, slotting, and blocklisting in instances where you're looking to power a more targeted experience.



Recommendations

Recommendations Capabilities

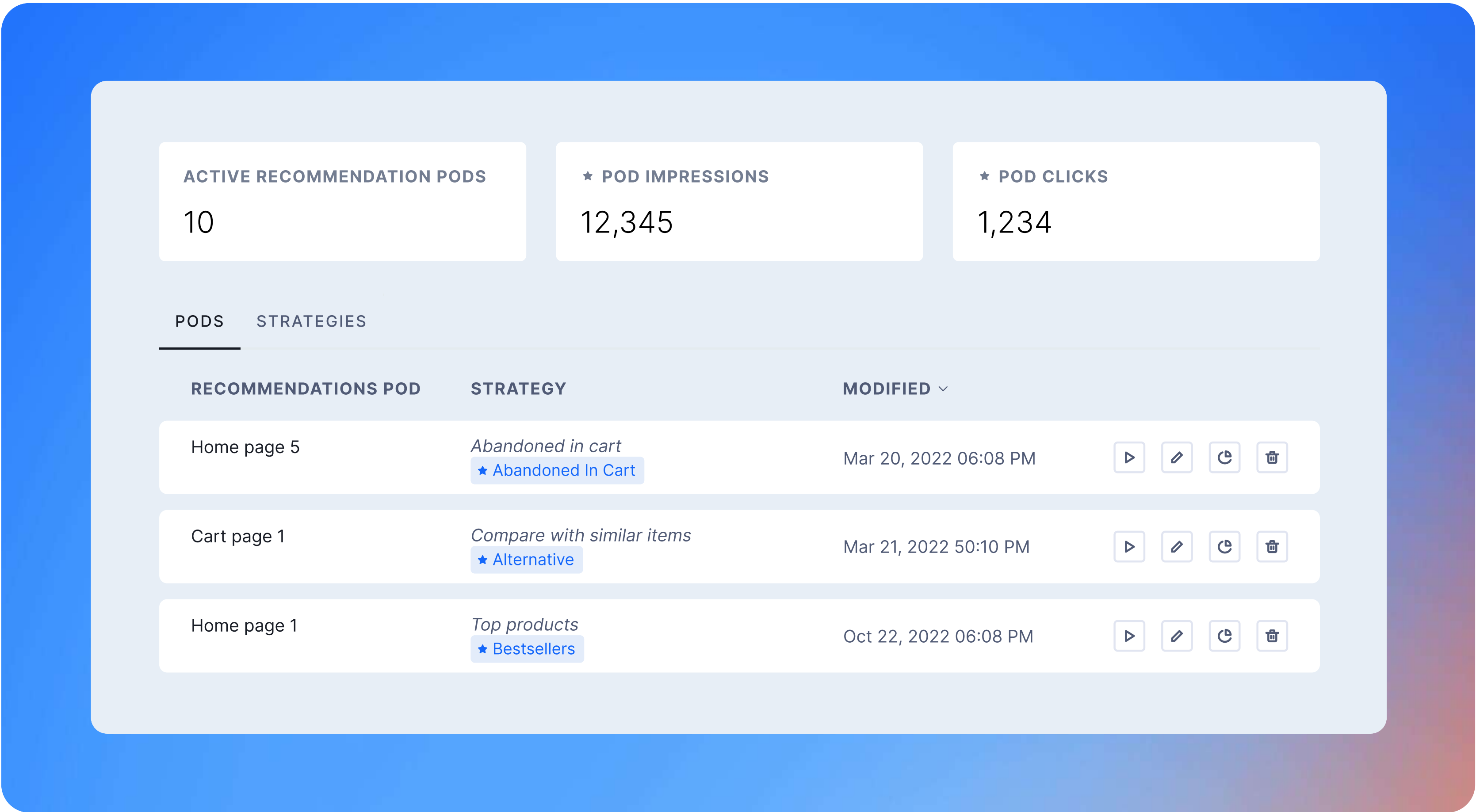
- Show appropriate recommendations across shopping journey
- Choose from 9 recommendation strategies
- Compatible with searchandising rules
- ⚡ AI-powered recommendations

Product recommendations help shoppers explore related products at various points in their shopping journey, such as a category, product, or cart page. Because Recommendations are part of the Constructor ecosystem with Search, Browse, and Collections, any learnings captured in clickstream data in Recommendations inform each shopper’s personalized search and browse experience (and vice versa).

Depending on the context, such as on a product page, Recommendations can show shoppers alternative products to help them explore other options and ultimately make a

purchase decision. Once a shopper has narrowed down their selection, within the context of a cart or checkout experience it can often be helpful to show them complimentary items. For example, once a customer adds a laptop to their cart, it might make sense to show them a laptop carrying case, mouse, or external hard drive.

Constructor supports both these use cases and more within Recommendations. We also provide merchandiser-friendly tooling to see recommendation pods, understand their performance, and optimize them.



Recommendations Strategies

We currently offer 9 sets of logic that inform what is shown in each type of recommendation pod.

→ Complementary	Returns products often bought with the product that a shopper is looking at, or has in their cart.
→ Alternative	Returns similar type products. This can be an effective strategy when there are many choices and a shopper would benefit from a curated list of similar products.
→ Filtered	Returns products restricted by a preset product attribute. This can be used to curate recommendations to products similar to the viewed item.
→ User Featured	Returns products that users are most likely to convert on based on their individual behaviors and affinities.
→ Recently Viewed	Returns shoppers' own recently viewed products. This can bring them back to items in the same session or be used to continue a previous session.
→ Best Sellers	Returns the most popular items for a specific time frame (up to the past 30 days). Similar to User Featured, this can be used to encourage exploration high in the funnel.
→ Query Recommendations	Returns products after shoppers land on a zeroresults page. Shows products that other shoppers engaged with after making the same query.

PODS

STRATEGIES

STRATEGY

★ Alternative

★ Complimentary

★ Query Recommendations

★ Recently Viewed

★ User Featured

To optimize these strategies even further, Constructor also supports searchandising in select strategies. This means products within a Recommendation pod can be slotted or blocklisted by product or boosted, buried, or blocklisted by attribute. This allows merchandisers to fine-tune results for a variety of scenarios.

Imagine you want to ensure that specific brands are shown in a recommendation widget on a product page. You could do that by boosting that brand as an attribute. If you’re selling the latest gaming console and want the recently released accessories to be shown alongside it, you can achieve that by slotting them in position.



Quizzes

Quizzes Capabilities

Collect information from shoppers in exchange for a more personalized, curated set of product results

Leverage robust analytics to understand quiz performance and optimization opportunities

⚡ Create personalized experiences from quiz inputs, like curated results, reminders, emails, or landing pages

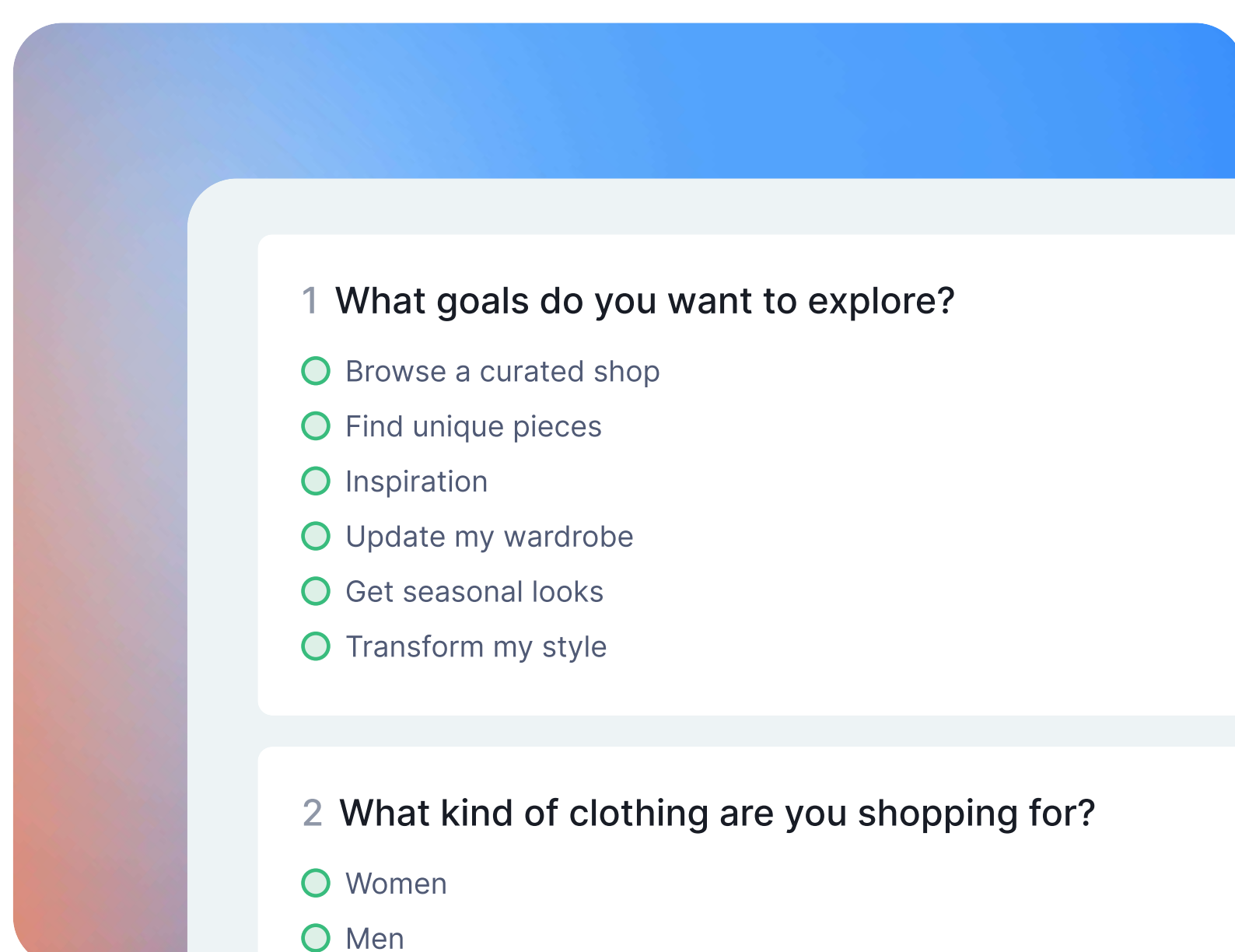
Quizzes allow merchandisers to translate their deep domain expertise into an online experience where shoppers are guided to make the right decision, similar to what shoppers might receive in-store from a highly educated sales associate

This can be highly beneficial in scenarios where a brand's product assortment requires some level of domain knowledge to effectively narrow down options, such as electronics, vitamins and supplements, or fragrances. Shoppers may know they want a specific product within those categories, but they might not know which one would best meet their needs, let alone what else to consider.

Merchandisers can design the quiz content (text and images) and flow — including logic — without developer support. And because they're built with non-linear flows, these product finders adapt based on customer interactions, creating a more dynamic and immersive experience.

Quizzes can also provide you an outlet to get to know shoppers better and further optimize their product discovery and overall brand experience. Via Quizzes, you collect zero-party data, or data customers willingly provide your brand in exchange for a better experience. You can then leverage these insights across your site and to feed marketing strategies, like emails, promos, and personalized landing pages.

When combined with an on-brand look and feel, Quizzes will help your ecommerce increase in-session conversion rates, RPV, and brand loyalty while reducing returns long-term.



Attribute Enrichment

Redirect Enrichment Capabilities

Review and manage enriched attributes and categories in our merchant tools dashboard

Run analyses to determine most important attributes based on user requests

⚡ Create new attributes and categories and enrich existing ones automatically

For years, search providers have used bad product data as an excuse for poor search and browsing experiences because they were built on outdated keyword-matching engines. Most ecommerce teams know that data plays a crucial role in their overall site experience, but it's an incredibly hard problem to fix.

Usually, data comes from a variety of disparate sources like vendors, PLMs, PIMs, MDMs, ecommerce platforms, or even spreadsheets. And even with all of these sources, there's no guarantee that product data is complete or accurate — leaving ecommerce teams to fill in the gaps.

With Attribute Enrichment, your team will no longer have to manually tag products or pay costly outside service providers to do it for you.

Combining Constructor's existing best-in-class AI with modern data science methods, our Attribute Enrichment engine automatically tags products with new, relevant attributes and categories on a daily basis. Merchandising teams can then review all of Constructor's suggestions, fusing AI with their domain expertise to help the system generate even better results over time.

Not only does this approach reduce mistakes and inaccuracies in product data, but it also reduces time to conversions, since shoppers can find the products they want quicker. All of this combined allows your team to focus on more strategic initiatives while delivering the top-notch product discovery experience that online shoppers want.

Item ▾	Description ▾	Category ▾	Unit vol ▾	Color ▾
 Billie womens ra... id12345	meet the internets favorite razor winner...	Health & beauty > ⚡ razors	⚡ 1 unit	⚡ pink
 Skechers men's r... id12345	walk and work out in comfort and sporty style with skechers rel...			⚡ grey
 Essie gel couture... id12345	my sources say this sheer tea rose pink...	Health & beauty > ⚡ nail polish		⚡ pink
 Fila women's v11... id12345	synthetic upper for durability; rubber out...	Shoes > ⚡ casual		
 Nature valley pe... id12345	nature valley™ crunchy bars are made with t...		⚡ 8.94oz ⚡ 6 pack	

Partnering with Constructor: What to Expect

While ecommerce teams can and should leverage AI to make a business impact, any tech solution is only as good as the humans behind it. You'll be hard pressed to find a product discovery platform that takes the word "partnership" more seriously than we do.

We work closely with each of our customers throughout our partnership, meaning:

- ✓ You have an open door to communicate with us on Slack and over email. We respond within minutes, not days.
- ✓ Each customer has a dedicated customer success manager as a primary point of contact, but also a dedicated engineering team and a dedicated product manager. Your needs come first — no matter how big or how small.
- ✓ Your feedback serves as critical input to our future roadmap. We don't build product features in a vacuum.
- ✓ We'll work with you day in and day out to obtain measurable lifts in critical business KPIs. This is over the course of our entire relationship. Your success is our success.





“The thing that i appreciate the most about Constructor — other than just the product itself — is that they’re a partner that truly wants to hear and incorporate feedback from customers and not build features in a vacuum. And that’s really what we value in a software partner.”

Kyle Sutter

VP of Technology, Fisheries Supply



“Aside from the positive return on investment, we love the ease of use, extremely hands-on support, and pleasant experience that comes from working with the Constructor team. If you’re an enterprise retailer looking to ramp up search, I highly recommend reaching out to Constructor.”

Gianluca Randisi

VP of Product, home24

Product Discovery As It Should Be: Built for Ecommerce. Powered by AI.

With every action customers take on your website, they’re telling you what they want. Constructor actually listens and continually learns from every single customer interaction.

Powered by advanced algorithms, transformers, and large language models (LLMs), Constructor’s Native Commerce Core™ delivers next-level personalized experiences — and unmatched ROI — across your entire website experience. Our holistic suite of product discovery solutions empower ecommerce teams to spend their time more strategically, create unparalleled customer journeys, and drive KPIs.

Let us prove how Constructor’s AI-powered platform can lift key metrics like conversions and revenue per user — on your site using your data, for free.

Prove It

