Crossing Minds

The Marketplace Guide to Faster Item Discovery

Including 5 proven discovery tactics to implement immediately

Recommended For You

BEST MATCH

Crossing Minds

The road to proactive discovery

Minimize clicks

How many clicks does it take for a customer to find a relevant item? Marketplaces with proactive discovery mechanisms can minimize clicks and enable faster discovery.

As more items get listed in a marketplace, discovery becomes increasingly important - and difficult. Each user has a specific taste, and irrelevant items create noise, causing users to churn. How can marketplaces help users find relevant items? And what strategies can be implemented to reduce the noise?
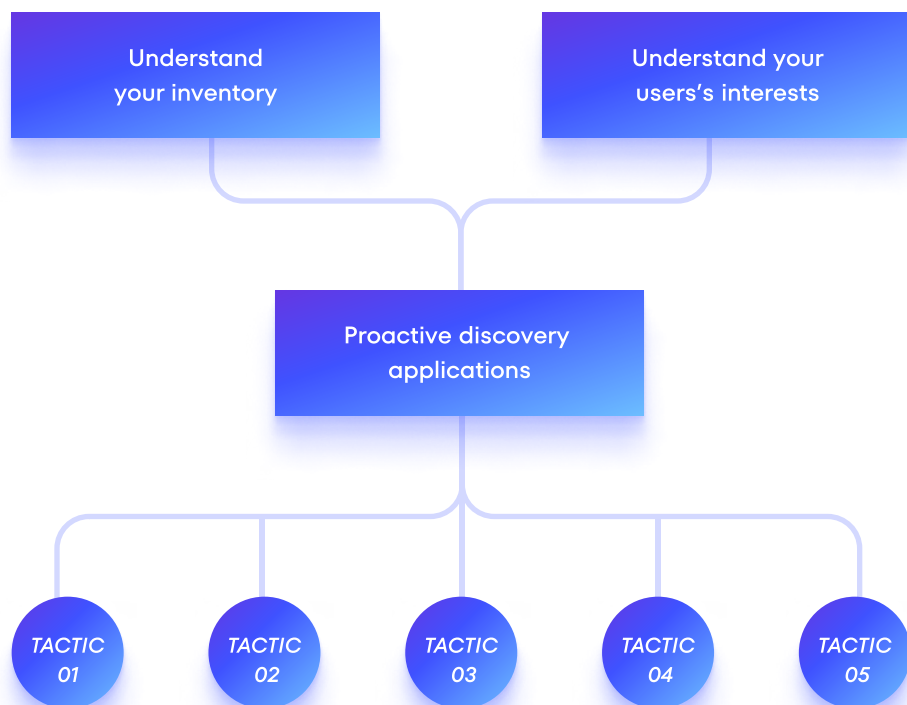
Each marketplace should develop a discovery strategy that facilitates conversions as quickly as possible.

While some traditional approaches to discovery (like filtering) can still be helpful, taking a passive approach jeopardizes your Match Rate. Forward-thinking marketplaces can't wait around. Instead, they should adopt a strategic approach to discovery by proactively surfacing relevant items for each user.

Section 1 focuses on understanding the item. To facilitate discovery, marketplaces must deeply understand their own inventory.

Section 2 focuses on understanding the user's interests. Marketplaces can implement several clever tactics to understand what a user really wants.

Section 3 shares five tactics and best practices for strategically implementing proactive discovery mechanisms.

Understand your inventory

Understand your users's interests

Proactive discovery applications

TACTIC 01

TACTIC 02

TACTIC 03

TACTIC 04

TACTIC 05

Why item discovery matters for marketplaces

Good discovery mechanisms curate relevant items for every user, enabling an interactive ecosystem that drives growth.

Discovery mechanisms (like recommendations, site search, and filters) are a vital organ for any high-functioning marketplace. Their key objective is to match supply with demand. Product & Marketing leaders should set high expectations for discovery mechanisms. Good marketplace discovery mechanisms will:

- Convert customers faster
- Show relevant items to each customer
- Prioritize lesser-seen items when necessary
- Complement & enhance marketing campaigns
- Retain demand-side users by feeding them relevant new items
- Retain supply-side users by guaranteeing that their listings will be shown to the right people

Vocabulary for marketplace usership

Depending on the industry, marketplaces have a wide array of names for their users. To simplify this, we will refer to "Supply-" and "Demand-" side

Industry	Supply-side users	Demand-side users
Ticketing & events	Organizers; Hosts	Attendees
Sharing economy	Hosts; Lenders	Guests; Borrowers
Buy & sell	Sellers	Buyers
Delivery apps	Restaurants	Customers
NFT exchange	Sellers	Buyers
Courses & education	Professors; Teachers	Students
Local services	Vendors; Professionals	Buyers

01

Understand your inventory

Extract high-quality data from each listing

A deep understanding of the unique identifiers applied to each item enables greater discovery precision.

Types of content to extract from items:

NLP text summaries

Image recognition

Video recognition

The foundation of effective item discovery is deeply understanding your item catalog. Your item catalog includes structured data like category, size, and location; it also includes unstructured data like photos & item descriptions. These pieces of data should be leveraged to enable users to easily discover those items. **The more unique identifiers or pieces of data you have for a given item in your catalog, the easier it becomes for discovery systems to effectively serve items that are relevant to end users.** Once you've identified which values that are required for an item to be posted, take a step back and define how flexible you are when it comes to those properties.

Traditionally, companies have done this simply by putting items in categories and sub-categories like "Hats" and "Straw hats". Those categories are meant to help shoppers find more items in the same category.

But categories also have limitations. A buyer of a Hawaiian shirt may also want flip flops and a Panama hat, which would be in a different category. By extracting high-quality data from each item through techniques like Deep Content Extraction, you can lay the groundwork to create **smart, taste-based connections** between all of the items in your inventory.

There is a world of high-quality signal waiting to be extracted from every item in your marketplace.

For example, when a user submits a photo along with an item, image recognition algorithms such as CNN (Convolution Neural Networks) can extract extremely valuable signal about what makes that product unique as well as its similarity to other products. This is particularly useful in cases where images were created with high intentionality - such as promotional images for events, movies, and books.


has pocket

youth sized

organic
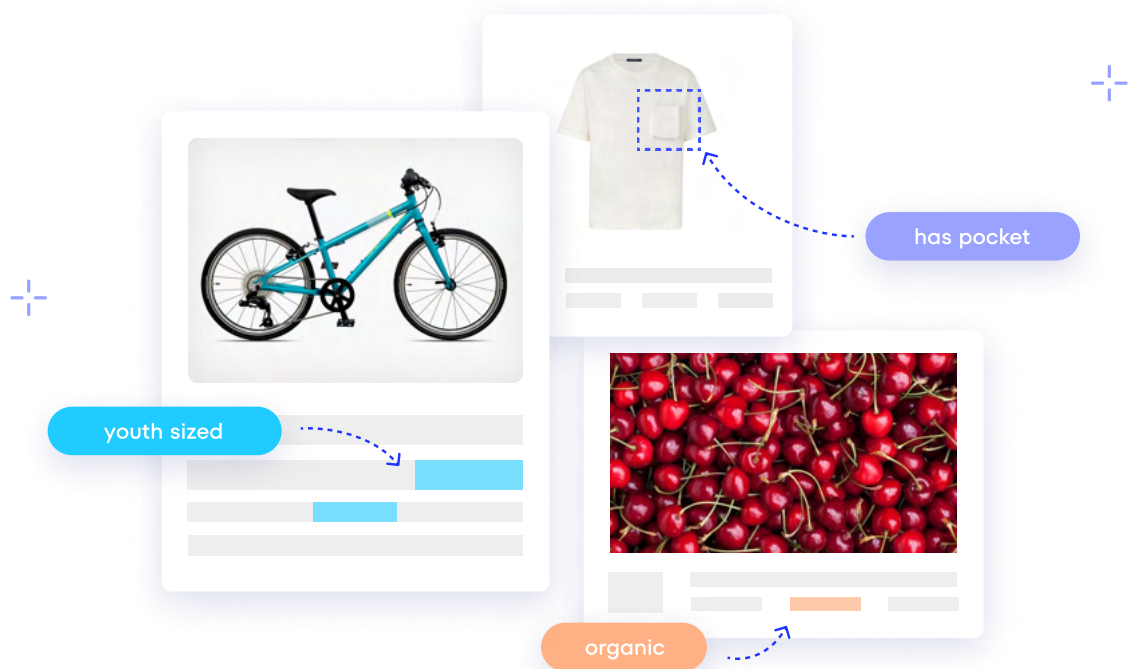
Structure & Speed matters:

Automating the data extraction for each item enables demand-side users to discover that item quickly. This creates a better experience for the supply-side user, who quickly received the desired attention from their post.

Gather signal from User-Generated Content

UGC fields like "item description" can capture uniquely valuable information.
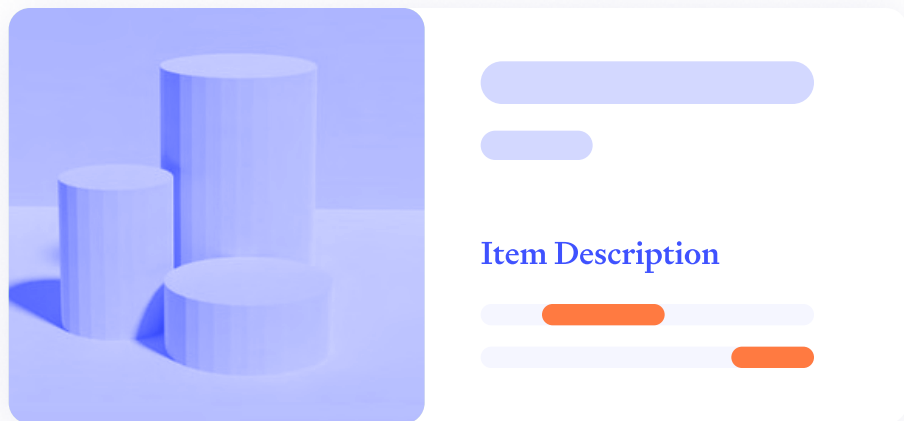
Everyone who has dealt with user-generated content knows the nightmare it can create in a Customer Data Platform (CDP). UGC fields like "Description" are often filled with unnecessary or irrelevant information, typos, and misplaced information. They're messy, unstructured, and often, hard to deal with.

Still, UGC fields can vastly improve search functionality, and they can also be helpful for recommendations. A few data cleanup techniques can effectively unlock extremely relevant signal from UGC.

UGC and content-based recommendations:

For example, the description **[distressed blue jeans with ripped knees, lightly used]** contains highly valuable information. Pairing "clean" UGC with semantic graph embedding and deep content extraction technology would enable you to recommend that item to specific users based on its unique content, like **[distressed]** and **[ripped]** - properties that naturally emerge from user-generated content descriptions.

Recommended for you:

Item description:

knees

distressed

ripped
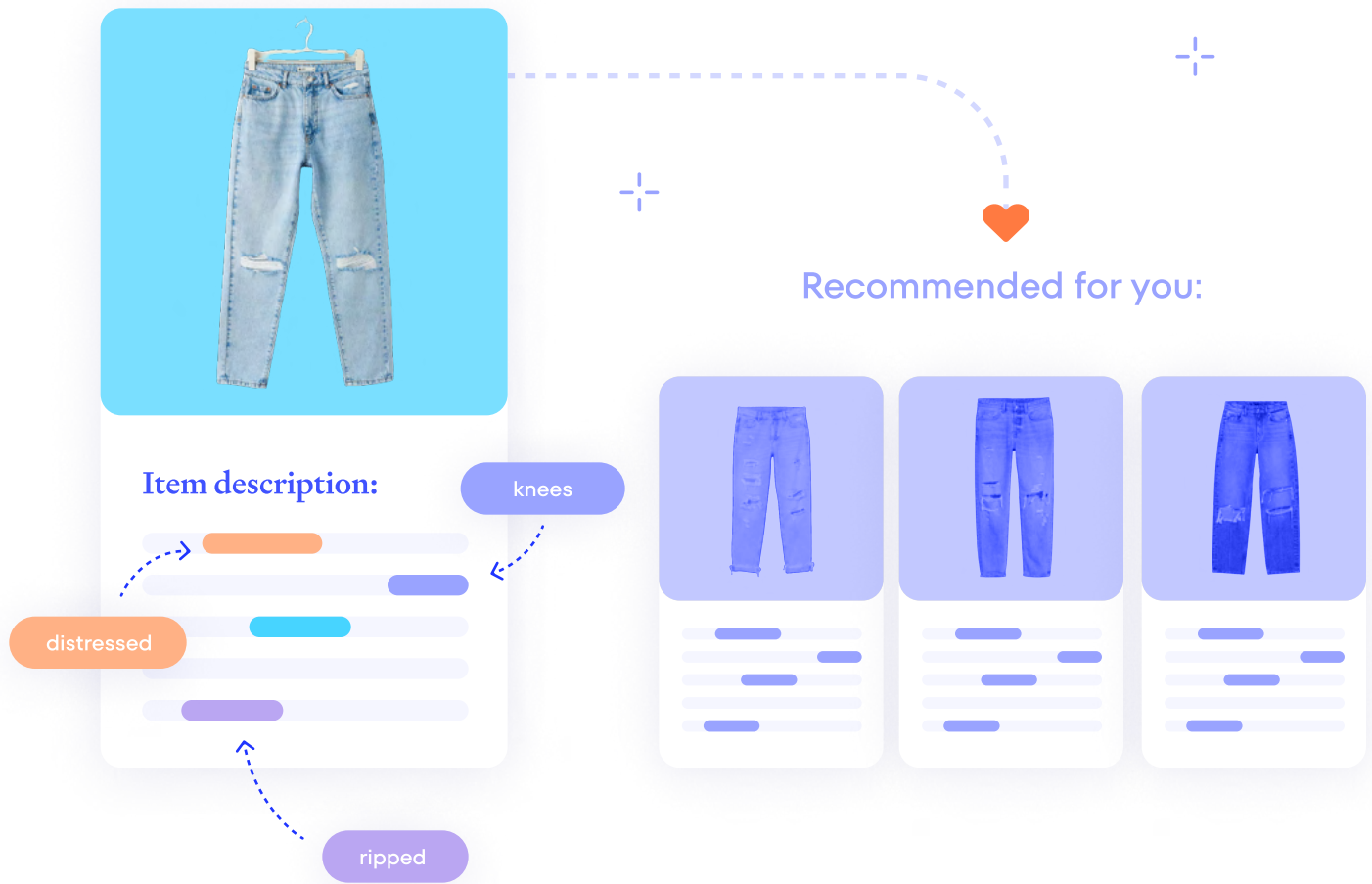
SECTION

02

Understand your users' unique preferences

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Gather intelligence on user browsing behavior

What does it really mean when a customer clicks an item?

Customers constantly gravitate toward their interests. If they see a product they like, they click it. If they see an email with irrelevant content, they ignore it.

Leveraging this behavioral signal is one of the most powerful ways to create high-quality discovery mechanisms.

However, not all clicks and user actions mean the same thing. It's important to **understand what a click means in the context of the user journey and the browsing experience**.

Two customers may browse your site in very different ways. It's important to consider those subtle nuances when gathering intelligence on browsing behavior.

A click in context:

When a customer clicks an item, they're also expressing interest in its individual attributes, like category, color, and size.

Sample browsing behaviors:

- Clicks
- Add to cart
- Remove from cart
- Add review
- Save for later
- Time on page
- Scrolling
- "See more"

Real-life example:

Here are two users who added Item X to their "Save for later" list:

Customer 1 — Added **350** items to "Save for later, including **Item X**.

Customer 2 — Added **2** items to "Save for later," including **Item X**.

Clearly, the two customers are **using the browsing experience differently**. They have expressed interest in certain items, but it's unlikely that both customers have the same buying intent with Item X. Recognizing those nuances and mapping them appropriately allows you to create highly effective recommendation & discovery mechanisms.

Time decay and taste evolution:

How often do your customers' interests change? Depending on your audience and product, your customer interests may change significantly over time. These evolving interests should be reflected in their experience - by showing an item they were interested in 6 months ago, you might be losing out on their interests now.

- Food preference
- Fashion preference
- NFT preference

Interest level vs *Time*
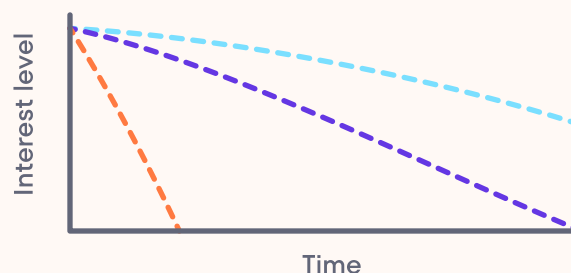
Account for an evolving inventory of items

A user just submitted a new item. How quickly can it be shown to the right person?
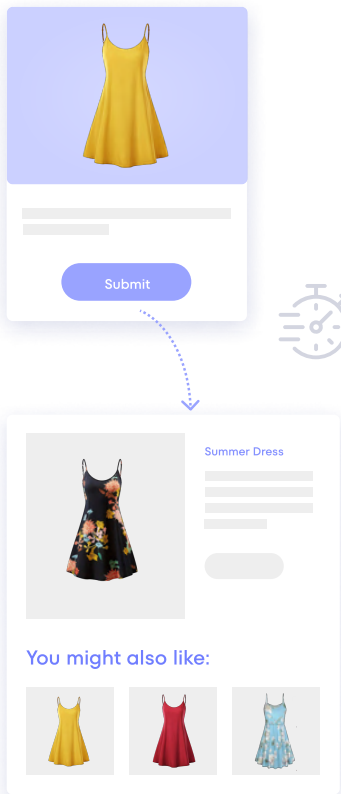
Successful discovery hinges on the ability to surface the right item for each user. This can be difficult even with a relatively unchanging inventory of items (like traditional retail e-commerce). For marketplaces with a constantly-changing inventory of items, surfacing the right item for each user becomes extremely complicated.

Content-based recommendations, described previously, enable you to understand what each item really is, and recommend it based on its attributes. **But when a new supply-side user submits a new item, it needs to be discoverable as quickly as possible.** If a supply-side user isn't paired with demand quickly, they'll churn.

That's why real-time recommender systems are so important. Real-time recommenders start learning how to recommend an item the moment it's submitted.

Submit

Summer Dress

You might also like:

03

Best practices and considerations

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Show personalized categories on landing pages

Help your users find more of what they love by recommending a category when they start a session.

Proactive category recommendations:

If you've successfully gathered insights on what each user is interested in, you can begin to recommend categories of items when they land on your site. This is particularly helpful for facilitating discovery proactively.

Baby Clothes For You:
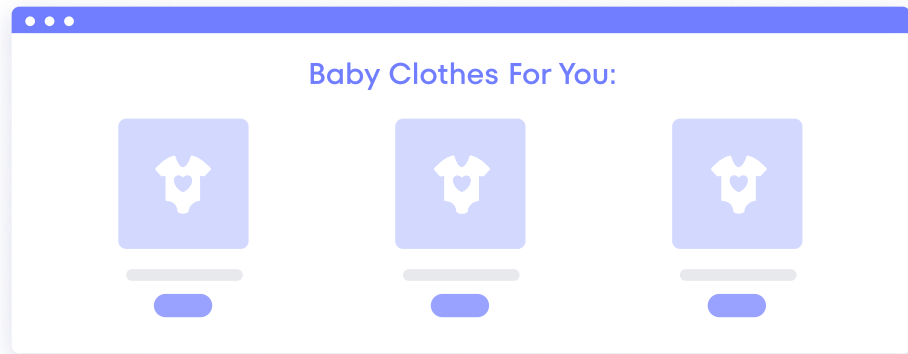
Here are a few examples of carousels that can improve the discovery experience on your landing page:

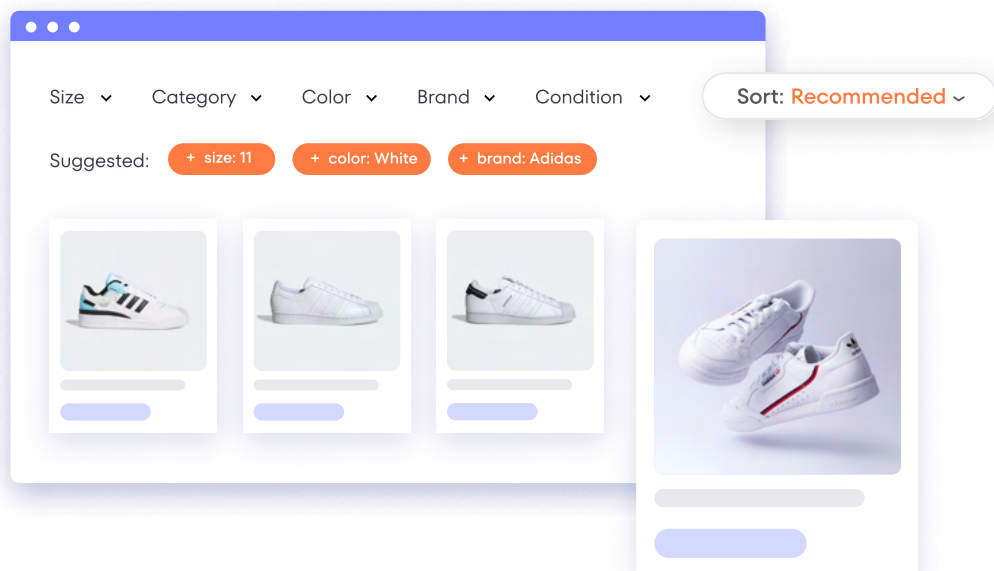| Category	Example
Price	"Deals under $30"
Type	"Upcoming Symphony Concerts"
Location	"Rentals near Maui, Hawaii"
Style	"80s Throwback Tees"

Default sort order: "Recommended for you"

Make browsing easier with recommendations integrated into your site filters.

Armed with a clear picture about which items are relevant for which users, it's time to put those recommendations in front of customers. **Recommendations are most powerful when users are in a "browsing" mindset**, which is particularly relevant for marketplaces that have an evolving inventory of items.

When a user starts to filter items, make the default sort order "Recommended for you". That way, each customer will see the most relevant items that also meet the filter criteria they've defined.

| Size ⌄ | Category ⌄ | Color ⌄ | Brand ⌄ | Condition ⌄ | Sort: Recommended ⌄ |

Suggested: + size: 11   + color: White   + brand: Adidas

Use appropriate discovery metrics

How should marketplaces measure discovery for both supply-side and demand-side users?

> ### Match Rate is key
>
> Match Rate is the paramount metric for marketplaces. How effectively are you pairing supply with demand?

Marketplaces with strong discovery mechanisms are successfully fulfilling a promise to both supply-side and demand-side users:

- Supply side promise: "Submit your item and we'll show it to relevant people"
- Demand side promise: "Join our platform and we'll show you relevant items"

This creates a unique dynamic that traditional retail e-commerce stores don't have to balance.

In addition, KPIs are not fully correlated to the end user's experience. Discovery metrics should also consider the supply-side availability. For example, vacation rental marketplaces should consider that some discovery metrics will increase (i.e. pages per session) when supply increases as well.

Several key metrics will tell the story of success for marketplace item discovery:

Match Rate	Like conversion rate. How successfully is demand getting paired with supply?
Time to Match	How long until demand converts?
Time to Recommend	How long until newly submitted items can be recommended?
Email CTR	(Click-Through Rate). How often did recipients click a recommended item via email?
AOV	(Average Order Value). AOV should increase as a function of improved discoverability.
Pages Per Session	How many pages did a user visit per session?
Product Pages to Match	How many product pages did a user visit before converting?
Abandonment Rate	Also known as Zero rate. How often did users exit before converting or finding a match?

Proactively push relevant items across channels

Marketing & Retention teams can leverage browsing behavior insights to push recommendations across channels.

Discovery shouldn't stop when a user exits a website or app. If you've successfully gathered insights on user browsing behavior, you can continue to facilitate discovery after the user exits.

Email, push notifications, in-app notifications, and even SMS can be used strategically to help users discover relevant items they might have missed.
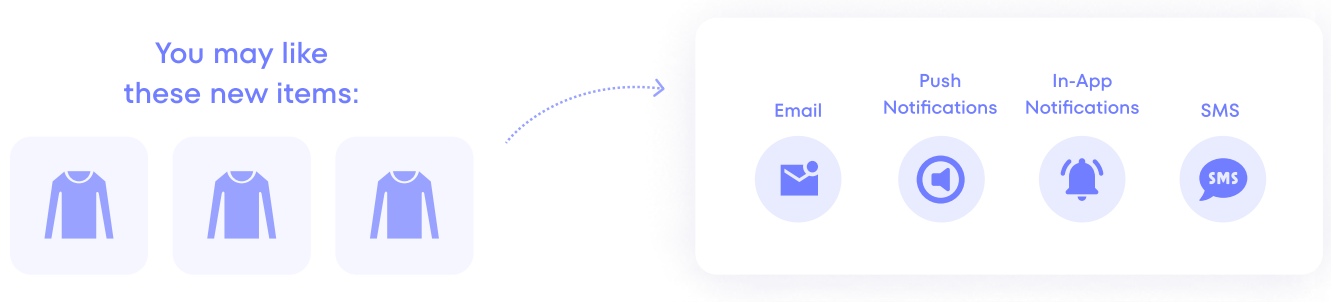
This can also be used strategically when introducing new products. If you can automatically process a new item's compatibility with any given user, you can tailor your emails accordingly and only include that item if it's relevant for the user.

Personalize upsell & cross-sell at checkout

Harness high-intent moments like checkout to increase Average Order Value (AOV).

Checkout is a high-intent moment. Customers have already shown that they want the item and are ready to pay for it.

But that doesn't mean discovery should end. In fact, it's an extremely effective moment for discovery, with a caveat: It needs to match their expectations for the moment.

Customers may have missed a more expensive item that suits their needs better. And they may not have considered other items that pair well with their intended item.

These **upsell and cross-sell moments have extremely high revenue potential** if you have already created smart matches between users and items. Smart discovery mechanisms include a personalized carousel for upsell (show similar items with a higher price tag) and a personalized carousel for cross-sell (items frequently purchased together).

Frequently Bought Together

Cross-functional considerations for discovery mechanisms

Discovery mechanisms should play a cross-functional role, enhancing business insights, product, and marketing campaigns.

High-quality site discovery contributes to the goals of numerous teams: Product, Marketing, Retention, and Data.

Product team	Product teams play the leading role in improving discovery. Discovery mechanisms like recommendations, search, and filters are integral parts of the browsing experience.
Marketing team	Discovery mechanisms should enhance marketing campaigns by prioritizing high-priority items.
Retention team	Email, SMS, and in-app notifications are key channels where retention teams can show relevant new items strategically.
Data team	Data teams provide expert-level insights around what kind of data is collected and how it can be used. Data teams also benefit from discovery systems because they provide an exceptionally valuable layer of insight about a user's interests.