

Episerver Product Recommendations

User Guide





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Episerver Product Recommendations User Guide

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Product Recommendations

With Episerver Product Recommendations, you can provide a personalized shopping experience for visitors to your e-commerce website. Personalization is based on website interaction such as order history, visitor profiles, and intelligent algorithms to suggest products of interest. A developer must first configure the tracking, personalization service, and recommendation widgets, then you can start working with Product Recommendations to define recommendations strategies using the for the Personalization Portal. See the Episerver Personalization developer guides.

How it works

Recommendation widgets are components used for presenting product recommendations in pages. Widgets are configured in the Episerver back-end according to an agreed-upon strategy. Each widget can have its own strategy that depends on the identified KPIs for personalization. If there is more than one widget served on the same page, each of the widgets also can have a different strategy.

A strategy comprises a number of algorithms, developed by Episerver's data scientists and machine-learning experts. The algorithms are applied to each widget in a stack formation. This means that the personalization engine examines the visitor's behavior, and tries to return a product recommendation matching the first algorithm in the stack. If the system is unable to identify a suitable product, the next algorithm in the stack is used, and so on, until the required number of products for this widget are returned.

From the Product Recommendations interface, yo u can refine the product recommendations generated by Episerver algorithms, or override product recommendations to execute specific merchandising campaigns using your overall site strategies and targets.

You can control merchandising rules in the Episerver for the Personalization Portal, switching them on or off, and changing them in real-time.

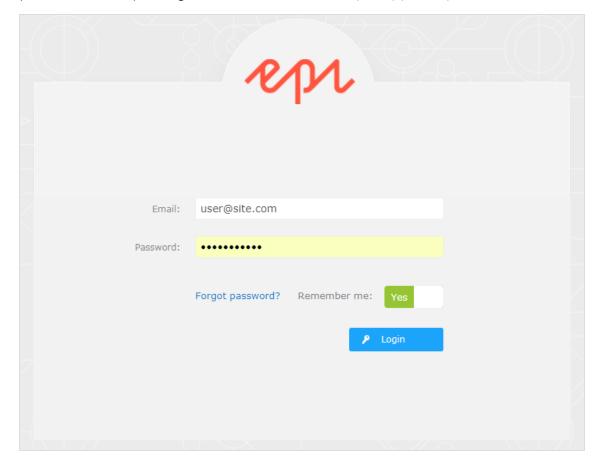
Product Recommendations interface

The Product Recommendations interface is available in the Episerver for the Personalization Portal.

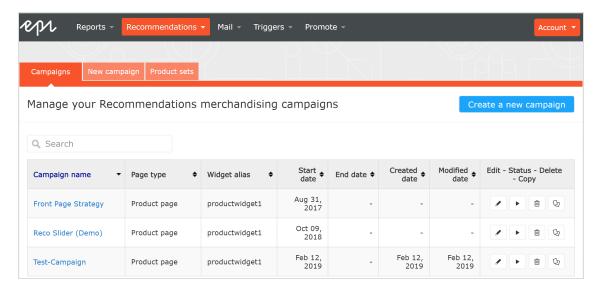
1. Access the Episerver for the Personalization Portal at the URL provided to you when your user account was created. This will be one of the following URLs:

```
https://smartmanager.peerius.com/admin
https://smartmanager.peerius.episerver.net/admin
```

2. Log in to the Episerver for the Personalization Portal with your provided credentials. If you do not have your login details, contact developersupport@episerver.com



3. Select the Recommendations tab in the navigation bar. In the Product Recommendations interface, you can create new merchandising campaigns, and view or edit the campaigns that you have already set up.



- 4. Click Create a new campaign to start setting up a new campaign. See Setting up an Email Product Recommendations campaign (in the Episerver Email Product Recommendations User Guide) or Setting up a Product Recommendations campaignSetting up a Product Recommendations campaignSetting up a Product Recommendations campaign.
- 5. To edit an existing campaign, click the campaign name or **Edit** next to it.

Setting up a Product Recommendations campaign

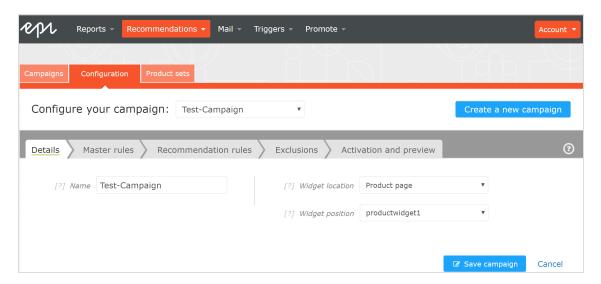
To create a new Product Recommendations campaign, click Create a new campaign from the Recommendations overview screen, or select the Recommendations > New campaign tab. The campaign editing screen appears. The set-up process involves the following steps:

- 1. Configuring main campaign details
- 2. Defining master rules
- 3. Defining product recommendation rules
- 4. Applying exclusions
- 5. Setting up activation and preview

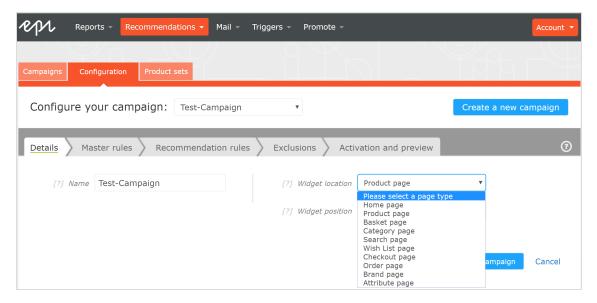
Configuring main Product Recommendations campaign details

In the Details tab, configure the main details of the Product Recommendations campaign: name, location and position of the widget to which the Product Recommendations campaign is applied.

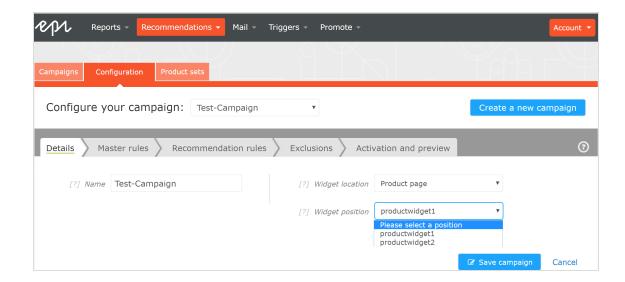
1. Enter a name for the campaign you are creating, such as Product Page Promotion or Brand Rule.



2. Select the widget location; this is the page type where the target widget of the Product Recommendations campaign is located.



3. Select the widget you want this campaign to be applied to. The widget position drop-down lists available widgets on the selected destination page.



Defining Product Recommendations master rules

Tip: Setting up Master rules is optional.

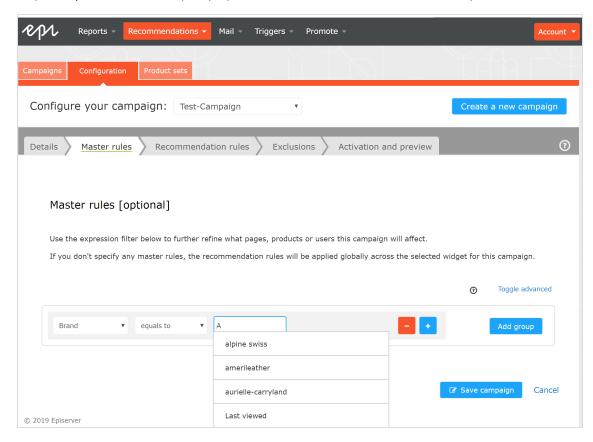
Master rules let you refine the Product Recommendations campaign effects to pages, products, or visitors. If you do not specify any master rules, the merchandising rules are applied globally across the selected widget for a campaign. If you apply a Master rule, it must be satisfied to apply product recommendation rules.

Examples of **Master rules** frequently used:

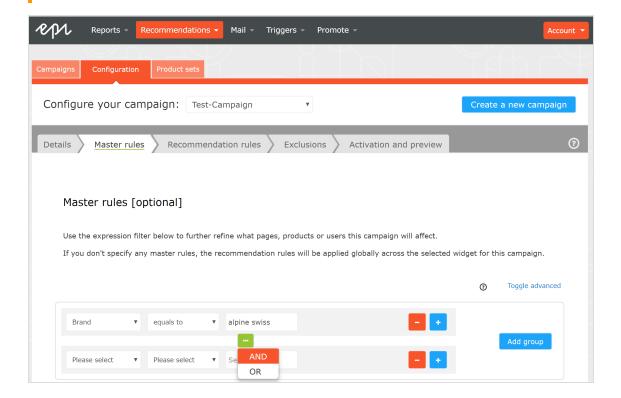
Use case	Master rule	Recommendation rule
Recommend only products from the same brand as the current product being viewed.	Brand equals to and type the brand name in the Search field.	Brand equals to and type the brand name in the Search field.
Recommend a specific product SKU when a specific product is viewed (i.e. override with a hand-picked product).	Ref Codes equals to and type the product SKU.	Ref Codes equals to and type the product SKU.
Only recommend products above a specific price when a user is viewing a product above a certain price.	Sale Price greater than or equals and type in the price (such as 25).	Sale Price greater than or equals and type in the price (such as 25).

Use case	Master rule	Recommendation rule
Do not recommend discounted products when a user is viewing a full priced product.	Discount equals to False.	Discount equals to False.

- 1. To add a Master rule, select the product attribute for your products from the dropdown list. The attributes are based on the product feed, plus a few attributes that Episerver creates by default. If you do not see the attribute that you want, add it to your product feed.
- 2. Select the condition you want in your rule. For attributes that have a text value, such as Color or Brand, choose between equals to or NOT equals to. For attributes with a numeric value, such as Sale price or Unit price, you also can use comparison operators like greater than or less than.
- 3. In the text field, enter the value of the attribute to be evaluated. For most attributes, a drop-down list shows values when you click in the text field. You also can start typing in the box to filter the results. To select a value, click on it. Numeric values (such as prices) do not have a pre-populated list; enter the value manually.



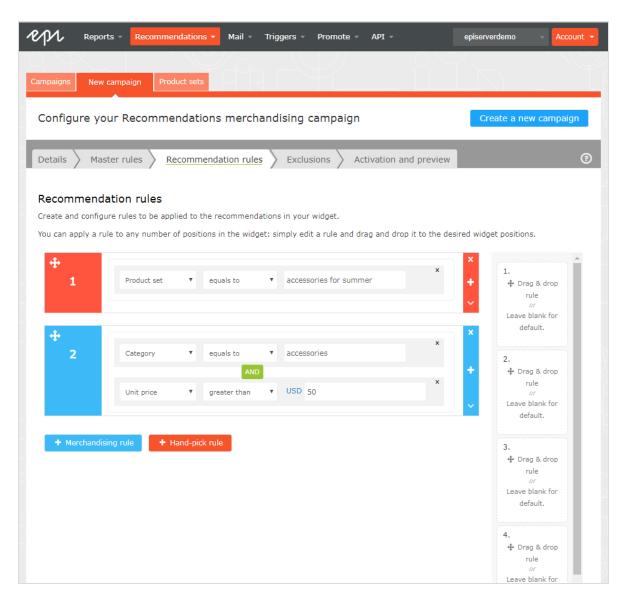
Note: You can add multiple rules by clicking the **Add group** or **+**. When using multiple rules you can choose how you want them to interact by setting the **AND** or **OR** operator.



Note: To remove a rule, click minus - next to it.

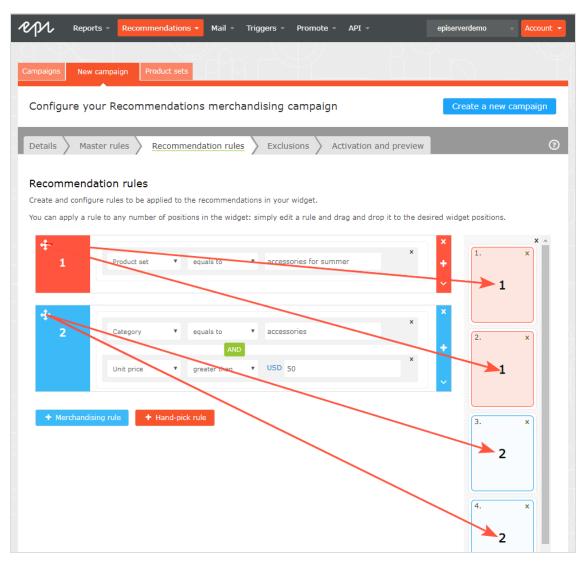
Defining product recommendation rules

Create and configure the rules to be applied to the product recommendations shown in your widget. You can apply a rule to positions in the widget. You also can create different rules for each position, or leave a position blank to show the default output of the Episerver algorithms.

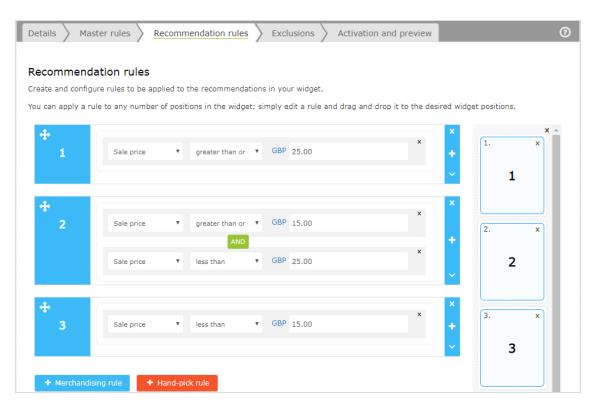


- Click Merchandising rule to add another recommendation rule.
- Click Hand-pick rule to create a rule that creates a specific override to the recommendation rule when a specific product is viewed. For example, the rules in the previous image specify "product set equals accessories for summer."
- Use the drop-down fields to add the required criteria for the product recommendations in the same way as you would for a Master rule.
- You can add more than one criterion in the same rule by using +, and the AND and **OR** operators.
- After you finish setting up your rule, drag and drop the rule number to the required position in the widget, where you want it applied. The following image shows rule 1

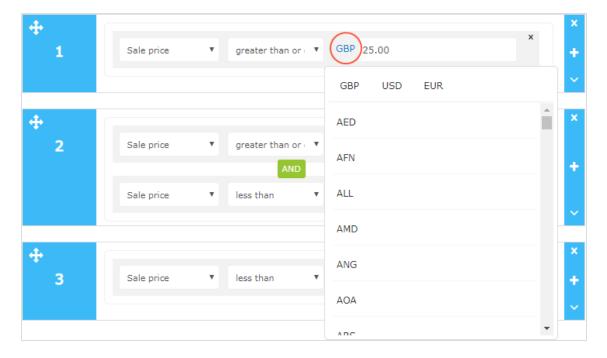
applied to product position 1 and 2, and rule 2 applied to product position 3 and 4. You can apply the same rule to more than one product position. If you want the same rule to apply to all products in a widget, click **Apply to all**.

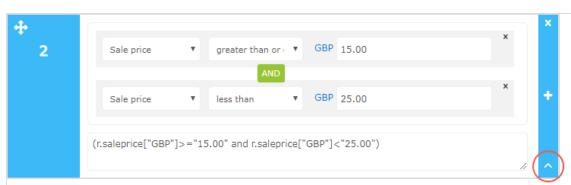


• You can add more than one rule to the same Product Recommendations campaign, if want to apply different rules to different positions in the same widget. For example, you can apply rules for the first product to have a sale price of **25.00** or more, the second product between **15.00** and **24.99**, and the third product under **15.00**. To add another rule, click +.



• Click the currency code to select another currency code from the resulting menu.





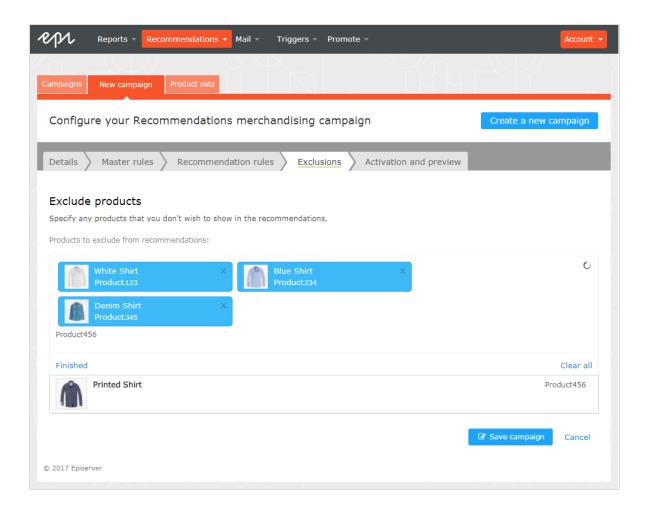
• Click Toggle Advanced if you want to manually enter the coding.

Applying exclusions

Tip: Exclusions are optional.

This feature lets you specify products that you do not want to show in the widget specified in the Product Recommendations campaign (in the **Details** tab). For example, you set up a product recommendation rule to show products from a specific brand – *BRAND1* – but there are some products from *BRAND1* that you actually do not want to show.

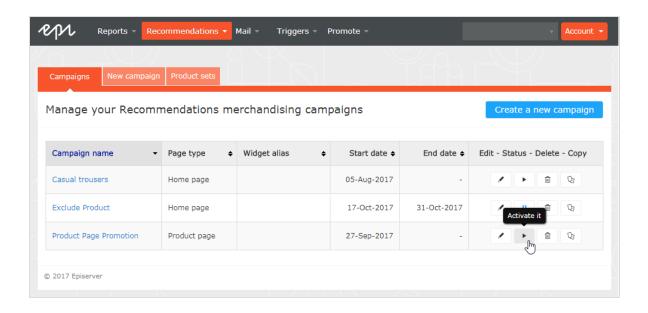
In the search field you can type a product SKU/refCode or title to find the product you want to exclude from recommendations. Click on the products in the results to add them to the exclusions list, and click **Finished** after you have added your exclusions.



Activating and previewing product recommendations

In the Activation and Preview tab, specify a start and end date for your Product Recommendations campaign, select days of the week to run the campaign, and preview the campaign using a product or category.

When a campaign is ready, click **Save campaign** and return to the **Campaigns** tab. New campaigns are inactive by default, so find your campaign and click **Play** to activate it. You can pause/deactivate a campaign in the same way. Changes are applied immediately to your site.





Product recommendation reports

This topic describes analytic reporting for Episerver Personalization. Analytic reports let you see the success of your campaigns, and which Personalization efforts work or do not

The reporting functionality in Episerver Personalization covers a variety of useful information.

Product Recommendations users and administrators can track and graphically monitor the following items:

- Total orders, revenue, and products sold
- Order, revenue and products sold through recommendations
- Average order value and units per order uplifts with product recommendations
- Best Performing pages
- Best Performing Widgets

Attribution Model

The Product Recommendations attribution model is the industry standard. If a visitor visits your site and clicks on a product recommendation, and then returns to the site within 30 days and buys the product they clicked and converted on, then full attribution for the conversion is given to Product Recommendations.

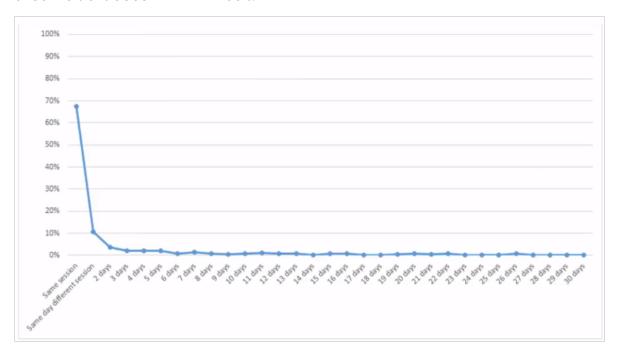
Example

If a visitor engages with a product recommendation, returns to the site and purchases the item, plus other items they were not recommended, Product Recommendations are only attributed the revenue generated from the recommended item and that they engaged with (clicked on) - not the entire basket value.

For example: A visitor is recommended a T-shirt for \$5.50 while browsing the site. The visitor clicks on the recommended T-shirt, however they leave the site without purchasing. The visitor returns later that day and purchases 2 of the T-shirts they were recommended and engaged with. They also purchase a jumper for \$14 that they were not recommended. The order total is \$25 and the total revenue attributed to Product Recommendations would be \$11 (which is 2 T-shirts at \$5.50 each). If the visitor buys multiple

units of the same item that was recommended to them and they clicked on, this collective sum is attributed to Product Recommendations. Equally, if it was just one item, the sole value of that one item is attributed to Product Recommendations.

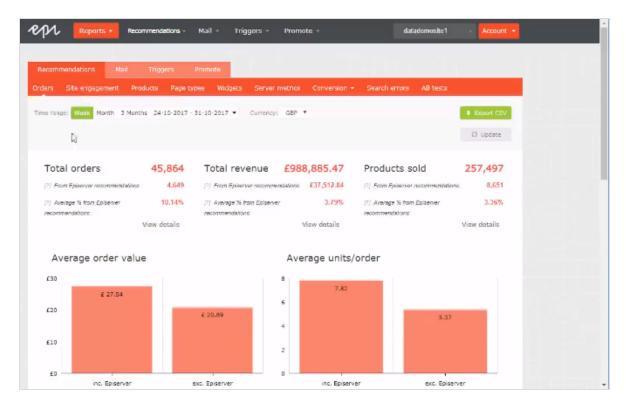
Product Recommendations can produce a graph that plots attribution against time. This shows when most people convert after being shown a product recommendation. The metrics used are CPC (click to purchase conversion) against time. On average, 85% of conversions occur within 24 hours.



Orders tab

The Orders tab shows orders from online channels tracked by Episerver Personalization.

From the Reports tab, select Recommendations, then click on the Orders tab.



- Time range. At the top of the page you can choose the time range for the reports. **Week** is the default selection, which shows information from the past 7 days. You can also choose Month, 3 Months or a custom time range. When you change the time range, click **Update** to refresh the results.
- Currency. Select the currency you would like to report on.
- Export CSV. You can export any of the reports you are viewing to a CSV file by clicking Export CSV.
- Total orders. Shows the total number of transactions tracked on the site as two units of measurement.
 - Episerver Recommendations. The number of orders in which an Episerver product recommendation was purchased.
 - Average percentage from Episerver recommendations. The percentage of orders in which an Episerver product recommendation was purchased.

• Total revenue.

• From Episerver recommendations. Shows the revenue generated from products bought through product recommendations, which is measured by totalling the

- unit value of products clicked and purchased via recommendations.
- Average % from Episerver recommendations. Shows the percentage of total revenue from Episerver Product Recommendations.
- Products sold. Shows the total number of units sold on the site.
 - From Episerver recommendations. Shows the revenue generated from products bought through Product Recommendations.
 - Average % from Episerver recommendations. Shows the average percentage of products sold from Episerver Product Recommendations.
- Average order value. Shows the average value of orders that contained an Episerver product recommendation compared to those that did not over the period.
- Average units/order. Shows the average number of units purchased in orders that contained an Episerver product recommendation compared to those that did not.
- Recommendation revenue from Episerver. Shows a graphical view of the total revenue from product recommendations (left-hand axis), and % of product recommendation revenue (right-hand axis), with the time period on the base line, to monitor the peaks and troughs in behavior.



• Orders data table. Shows revenue and products shown in a table. You can organize orders, revenue, and products sold by the following columns.

o date

29-10-2017

Total:

o total number of tracked transactions, revenue or units sold for that date

7,217

45,864

• total number of orders, revenue, or units sold, that contain or were sold through an Episerver product recommendation

708

4,649

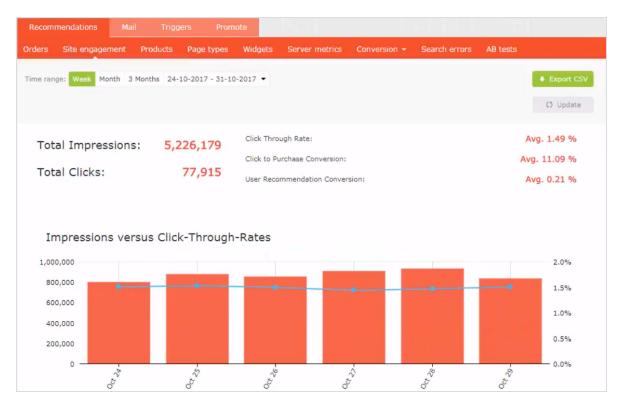
9.81 %

10.14 %

• the percentage of orders or products sold that contain an Episerver product recommendation

Site engagement tab

The **Site Engagement** tab shows page impressions, clicks, and click-through rates (CTRs) for product recommendations across your site.



- Total impressions. Shows the total number of page impressions where product recommendations were served.
- Total clicks. Shows the total number of clicks that have occurred on product recommendations.
- Click through rate. Shows a percentage and is worked out on the sum of clicks divided by the sum of impressions.
- Click to purchase conversion. Shows a percentage, and calculated on the sum of purchased recommended products divided by sum of clicks.
- User recommendation conversion. Shows the number of unique visitors who purchased a product recommendation, compared to the number of unique visitors who viewed a product recommendation, again shown as a percentage.
- Impressions versus click through rates. Shows a graphical representation of this information. The bars show the daily total number of page impressions with product recommendations, and the line shows the daily click through rate for product recommendations.

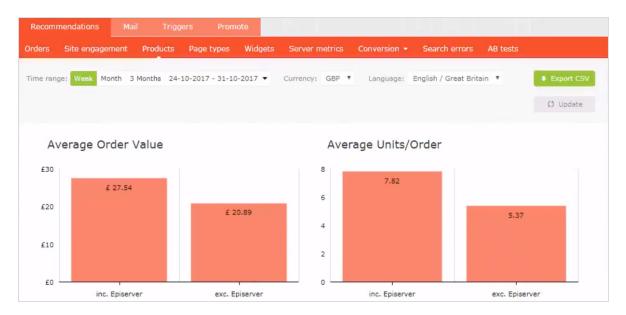
• Site Engagement data table. You can organize the data by the following columns.

Date 🕶	Impressions ♦	Clicks \$	CTR ¢	CTP ¢	URC 4
24-10-2017	804,136	12,124	1.51 %	11.45 %	0.21 %
25-10-2017	877,334	13,393	1.53 %	11.11 %	0.22 %
26-10-2017	858,335	12,875	1.5 %	10.4 %	0.21 %
27-10-2017	909,440	13,057	1.44 %	11.5 %	0.23 %
28-10-2017	936,594	13,795	1.47 %	11.69 %	0.22 %
29-10-2017	840,340	12,671	1.51 %	10.38 %	0.2 %
Total:	5,226,179	77,915	1.49%	Avg. 11.09%	0.21 %

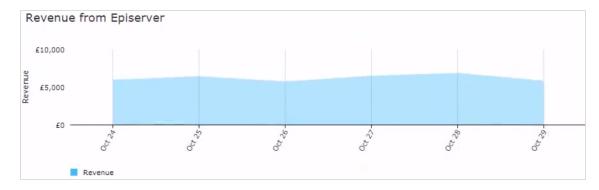
- Date
- Total number of impressions
- Total number of clicks
- Percentage of product recommendations that were clicked
- Percentage of purchased product recommendations after having been clicked
- Percentage of unique visitors who purchased from product recommendations versus unique visitors who saw product recommendations

Products tab

The **Products** tab shows the best-selling products on the site based on the revenue generated from Product Recommendations.



- Average order value. Shows the average order value of orders that contained an Episerver product recommendation compared to those that did not over the specified period.
- Average units/order. Shows the average number of units purchased in orders that contained an Episerver product recommendation, compared to those that did not, again over the specified period.
- Revenue from Episerver. Shows revenue generated from Episerver product recommendations on a daily basis through the time period, providing a visual to see trends in behavior.



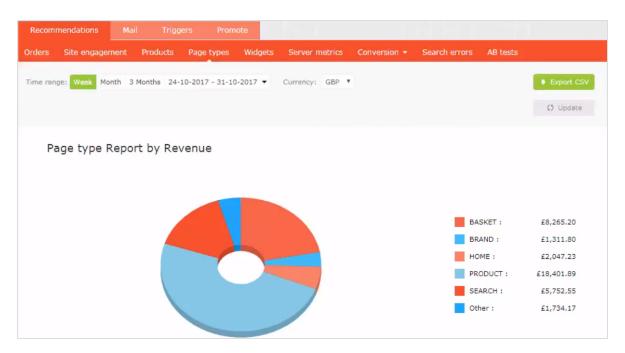
• Best-selling products data table. The table in the portal shows the top 10 products. However, you can export a full list by clicking Export CSV. You can organize the data by the following columns.

Totals:	Total Units Sold: 276,686	Recommendation Based Units: 9,677	Total Revenue: £1,104,421.97	Recommendation Based Revenue	
Product Ref.	Title \$	Total Units Sold ♦	Recommendation &	Total Revenue \$	Recommendation Based Revenue
654050	Maybelline Age Rewind Eye Concealer Light 6.8ml, Nude	1,045	125	£5,439.58	£667.6
716130	Makeup Revolution Luxury Banana Powder	552	130	£2,505.64	£592.9
726250	Real Techniques Prep & Prime Set	1,755	73	£13,720.33	£570.9
591912	Aptamil 3 Growing Up Milk Powder 900g	701	58	£6,280.64	£521.4
725870	Skinny Tan & Tone Oil	542	30	£8,204.86	£454.9
215469	Oral B Precision Clean Replacement Toothbrush Heads x4	1,764	49	£14,063.83	£390,4
410901	Ghost The Fragrance 150ml Eau de Toilette Spray	230	16	£5,085.94	£354.1
439400	Collection Lasting Perfection Concealer Fair 1, Nude	595	86	£2,403.78	£346.3
716342	I Heart Makeup Unicorn Heart Rainbow Highlighter, Multi	690	67	£3,343.29	£329.1
717535	Skinny Tan Dual Sided Mitt	482	72	£2,086.31	£308.2
Totals		276,686	9,677	£1,104,421.97	£41,994.5

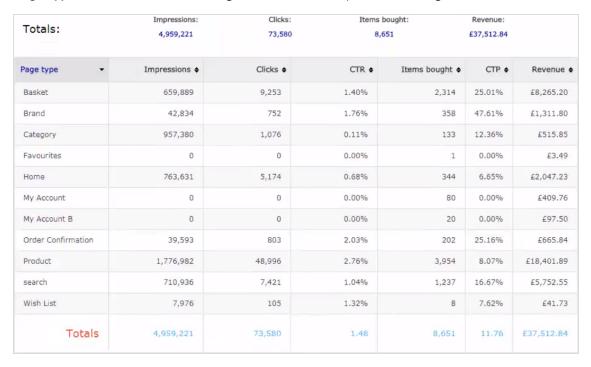
- Product code used to identify the product
- Title of the product
- o Total number of units sold on the site
- Number of units purchased through product recommendations
- Total revenue of the product on the site
- \circ Total revenue of the product through product recommendations

Page Types tab

The Page Types tab shows page types on the site where product recommendations are served, and how much Product Recommendations revenue is generated from each page.



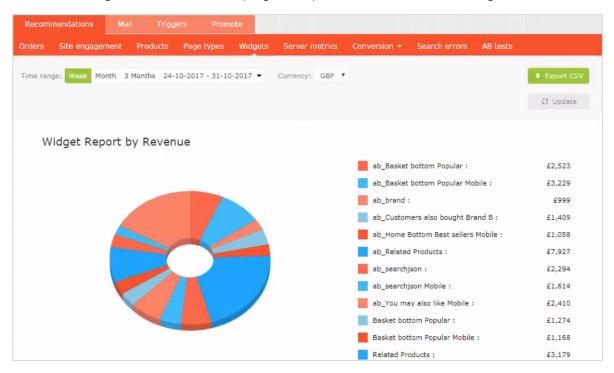
- Page type report by revenue. A pie chart shows which page types are generating the most Product Recommendations revenue.
- Page Type data table. You can organize the data by the following columns.



- Page type names where product recommendations are present
- Number of impressions for that page type
- Number of clicks on product recommendations for that page type
- o Click-through rate (CTR) for product recommendations, which is shown as a percentage, calculated by sum of clicks divided by sum of impressions
- Items Bought shows the number of items purchased through product recommendations on that page type
- o Click to Purchase (CTP) rate for product recommendations shows a percentage, calculated by sum of purchased recommended products divided by sum of clicks
- Revenue generated from product recommendations on each page type.

Widgets tab

The widgets reporting page is similar to the Page type report, but with finer detail for individual widgets, because some pages may have more than one widget.



 Widget report by revenue. The pie chart presented to visitors shows which widgets are generating the most revenue.

• Widget data table. Shows similar information as Page Types, except based at the widget level. Click on a widget name to see the individual position performance details within a widget. You can organize the data by the following columns.

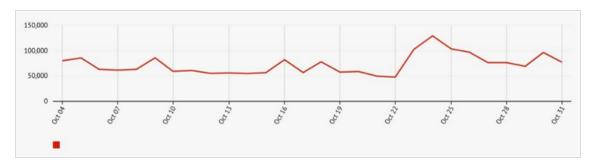
Widget	Impressions ♦	Position \$	Clicks \$	CTR ♦	Items Bought ♦	CTP \$	Revenue
1 favourite	308	-	15	4.87%	1	6.67%	£3.49
1 wishlist	2,705	-	33	1.22%	.3	9.09%	£7,77
1 ab_wishlist	5,669	-	80	1.41%	5	6.25%	£33.96
1 orderjson Mobile	5,912	-	88	1.49%	7	7.95%	£36.80
1 myAccountjson 5recs B	4,850	-	59	1.22%	20	33.90%	£97.50
1 Home Bottom New	92,021	-	705	0.77%	25	3.55%	£133.88
1 categoryjson	322,922	-	359	0.11%	37	10.31%	£151.69
1 ab_orderjson Mobile	13,563	-	230	1.70%	35	15.22%	£158.29
1 myAccountjson	10,617	-	107	1.01%	47	43.93%	£204.85
1 myAccountison Mobile	13,303		159	1.20%	33	20.75%	£204.91
1 orderjson	7,180		175	2.44%	73	41.71%	£210.72
l ab_orderjson	14,278	-	371	2.60%	87	23.45%	£260.03
1 brand	13,923		230	1.65%	42	18.26%	£312.75
1 ab_categoryjson	691,558		790	0.11%	96	12.15%	£364.16
1 ab_Home Bottom New	203,472		1,429	0.70%	76	5.32%	£403.33
1 Home Bottom Best sellers Mobile	151,824		997	0.66%	73	7.32%	£452.04
1 You may also like	235,797	-	1,546	0.66%	106	6.86%	£465.24

- Widget
- Impressions
- Position
- Clicks
- o CTR
- Items bought
- o CTP
- Revenue

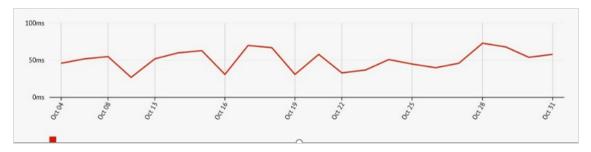
Server Metrics tab

The **Server Metrics** tab shows two graphs:

• Number of product recommendations served per day

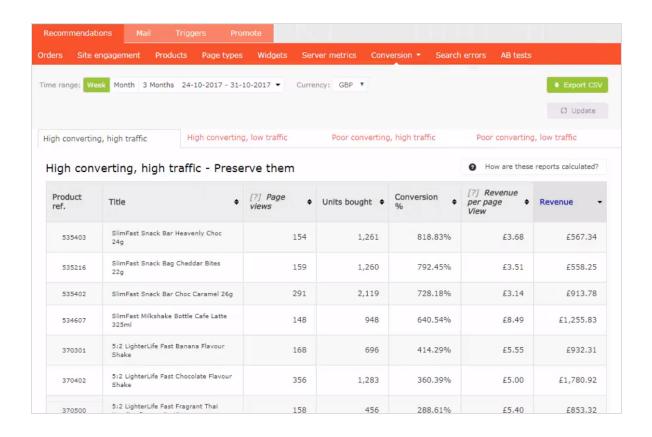


• Average time it takes to generate product recommendations and return them to a site (that is after a tracking request is sent)



Conversion tab

The **Conversion** tab shows the ranking of products based on their overall conversion and page views on a site. It does not focus on product recommendations but can provide easily accessible, actionable insights based on your whole site and all visitors and all orders.



Conversion definitions

- High converting. Any product that is in top 10 of the highest 10% of conversions
- Low converting. Any product that is in the lowest 10 of the lowest 10% of conversions.

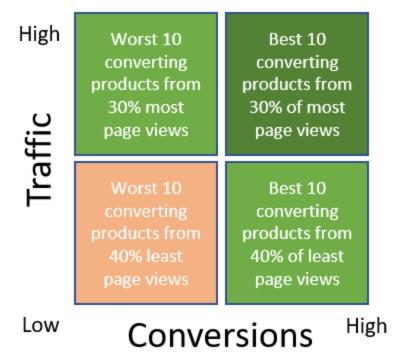
Traffic definitions

- High traffic. Any product that is in the top 30% of page views.
- Low traffic. Any product that is in the lower 40% of page views, and with the very lowest 10% excluded.

The following list and image shows the various combination views of conversion data.

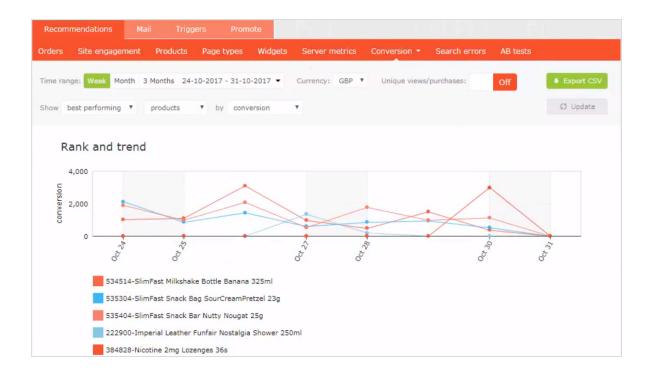
- High converting, high traffic. The best 10 best converting products on the site from the top 30% of products with most page views.
- High converting, low traffic. The best 10 best converting products on the site from the 40% of products with the least page views, excluding the 10% of products with the lowest number of page views.

- Low converting, high traffic. The worst 10 converting products on the site from the top 30% of products with most page views.
- Low converting, low traffic. The worst 10 converting products on the site from the 40% of products with the least page views, excluding the 10% of products with the lowest number of page views is displayed.



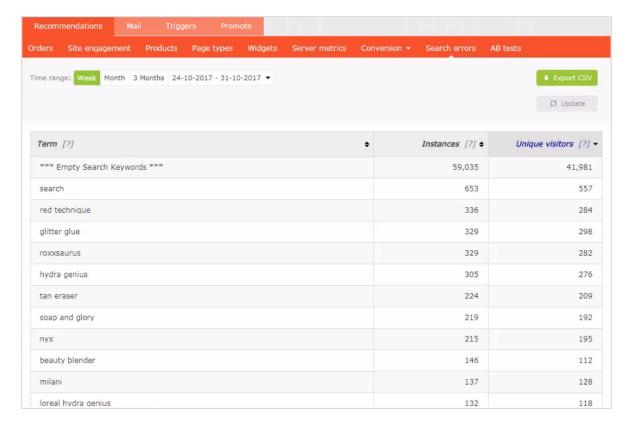
Rank and trend view

The ConversionRank and trend view lets you generate a Top 5 report of products, categories or brands sold on your site, based on a combination of criteria – best or worst performing by page views, revenue or conversion. The generated report shows data on the total page views, units bought, conversion, revenue per page view and total revenue from all sales on your whole site.



Search errors tab

The **Search Errors** tab shows the terms used in a site search that returned no results.

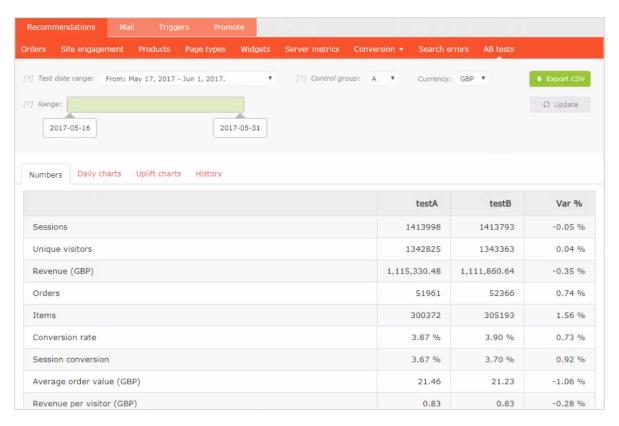


You can sort by the following criteria:

- The term that was searched
- The number of times a term was searched
- The number of unique visitors who searched for a term

AB tests tab

The **AB tests** tab shows the results from the latest Product Recommendations A/B test on a site, and past tests.



You can do the following in the AB tests view.

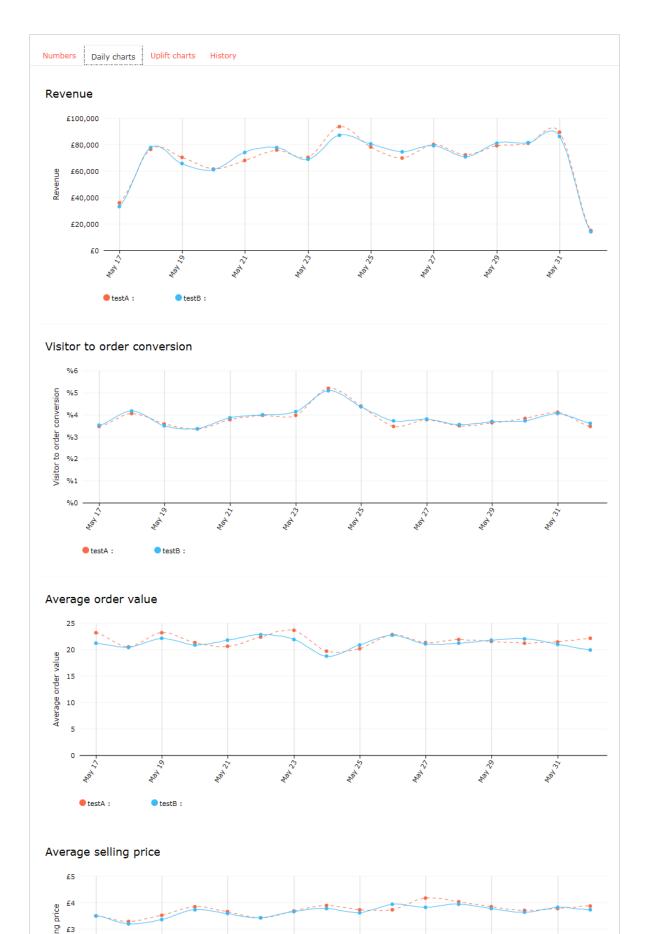
- Filter the results to specific dates by selecting the date range from the range bar.
- Set the control group.

Note: A/B testing supports up to 5 groups so you can view A-to-E testing.

- Select a specific currency that you want to examine.
- In the table you can view and compare key metrics on the site between all test groups, such as:
 - Visitor sessions
 - Site revenue
 - Conversion rate
 - Average order value through average selling price and units per order
 - Recommendation engagement and revenue

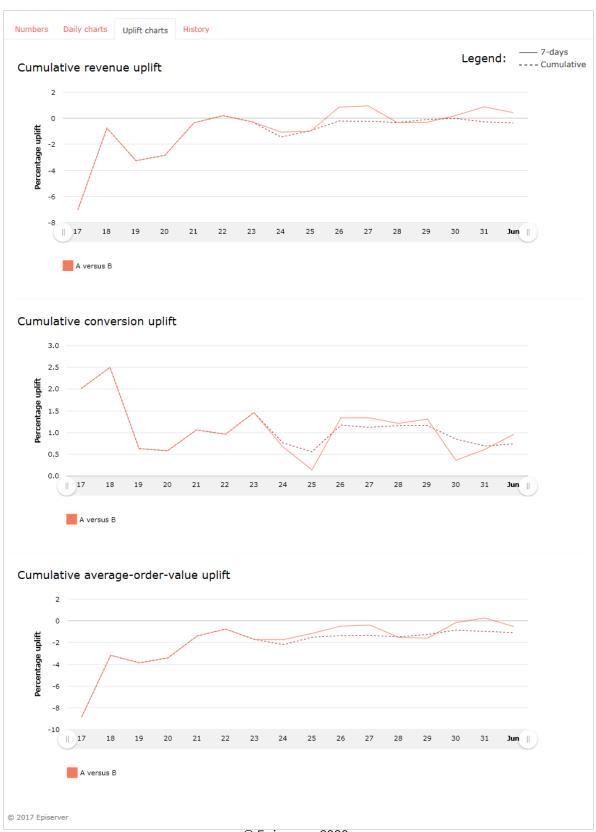
Daily charts

The Daily Charts view shows graphs for revenue generated, average conversion rates, average order value, average selling price, through to average number of units sold and number of sessions per day on the site.



Uplift charts

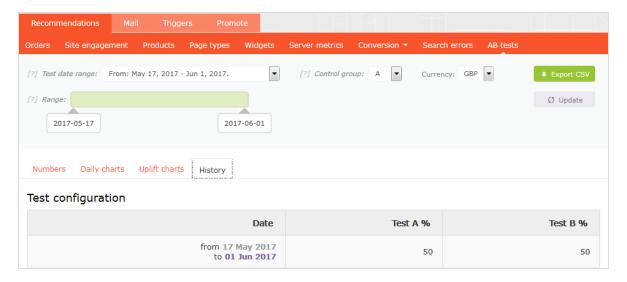
The **Uplift charts** view shows graphs displaying the revenue, conversion and average order uplift value for a chosen test group vs the control group for the selected date range (which is cumulative) and over the past 7 days



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History tab

The **History** tab shows a list of product recommendation A/B tests conducted on the site.



Episerver Digital Experience Cloud

The Episerver Digital Experience Cloud™ unifies digital content, commerce and marketing in one platform, including omnichannel solutions for intelligent campaigns. The platform uses artificial intelligence and behavioral analytics to deliver personalized experiences everywhere. With our secure, reliable platform you can quickly increase engagement, revenue and productivity, while getting the fastest time to value.

About Episerver

At Episerver, we believe digital transformation is a journey. We have been guiding customers for more than 20 years in providing standout digital experiences. Today our network of 880 partners, in 30 countries, supports 8,000 customers and over 30,000 websites. Founded in 1994, Episerver has offices in the US, UK, Sweden, Australia, Germany, Denmark, Finland, Norway, Poland, the Netherlands, Spain, South Africa, Singapore, Vietnam and the UAE.

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