Reasoning

The *Reasoning* settings define what kind of feedback your user receives in the result list of your recommendation phase. This page gives you an overview of all the available settings, shows you the difference between positive and negative reasoning texts and provides with you with a list of convenient reason variables for the ability to customize your result lists even more.

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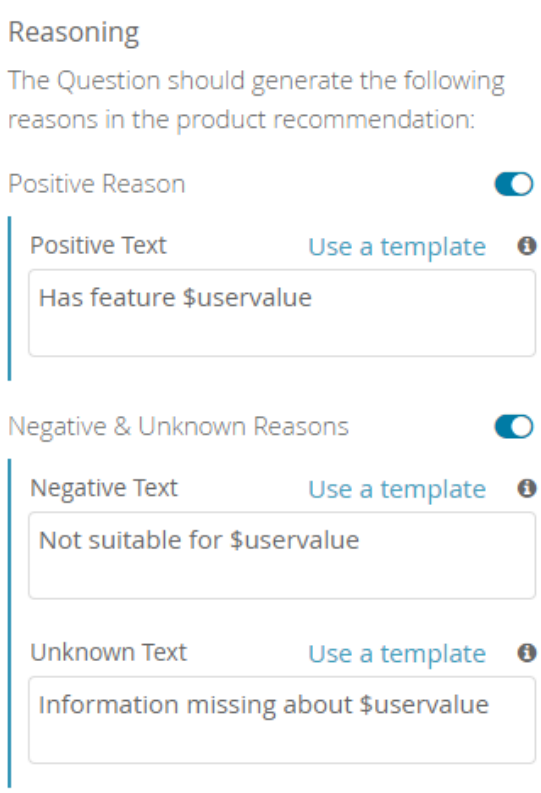
> **Question vs. Answer Option Setting**
>
> This page shows you the difference between the **Question (left)** and the **Answer Option (right)** settings.

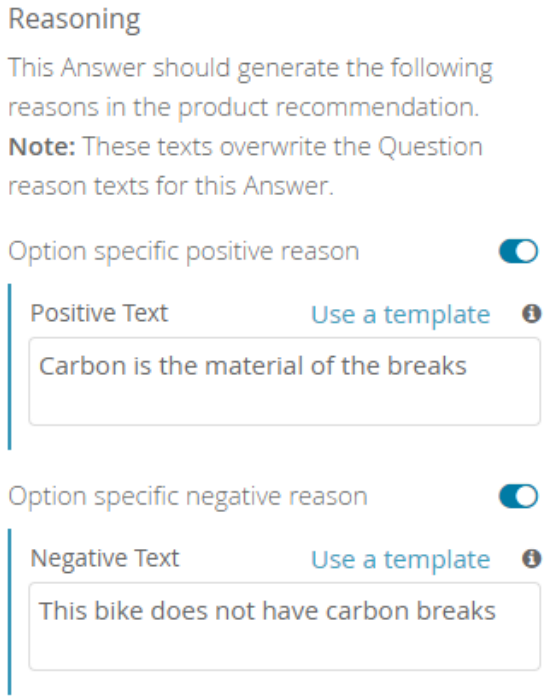
Question Detail View

The image below shows you the **Detail View for a question** within the Concept Board:



Answer Option Detail View

The image below shows you the **Detail View for an answer option** within the Concept Board:



With the aid of the reasoning section you are able to configure individual reason texts for each Question. The reason texts are shown in the recommendation.

For **more complex topics**, a specific reason text might be helpful; e.g. for plural nouns, lists of several values, when very content-specific explanations are not possible or there are flaws in grammar. For this purpose, there are Reason Texts for answer options. This is only possible if, **"The user can select one answer"** is selected in the Question Settings.

- An Option reason text overrides the text from the Question.
- Unknown reasons are not 'Answer Option' specific.
- The texts are only accessible and editable if the corresponding positive/negative reason toggle button is activated in the Question detail view.
- If the Question allows **multi-select answers**, a specific Answer Option reason text **cannot** be used anymore. In this case, the Question reason text is always used.

Reason Texts

For the Question you can activate the positive text, and you can activate the negative / unknown text separately. (see Reasoning Use case below).

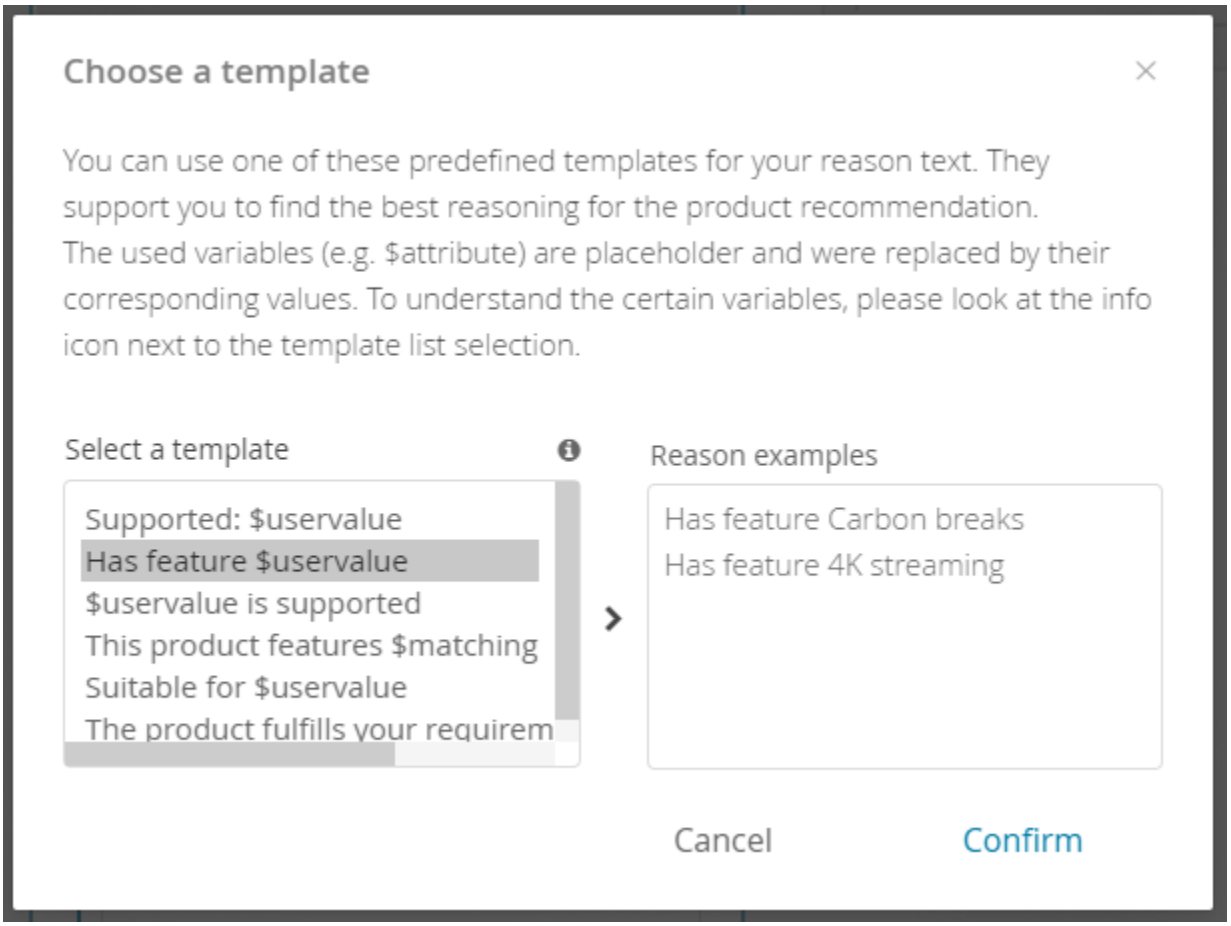
Variable Texts	Description
Positive Text	The positive text is used to signal that a product **does have a certain feature or property**.
Negative Text	The negative text is used to signal that a product **does not have a certain feature or property**.
Unknown Text	The difference between the negative text and unknown text is that this text signals that the product **does not contain any information about the feature or property**.

If you do not want to see unknown reasons, you can activate the toggle button "**Display Unknown as Negative Reason**". With that button active, all products with an unknown reason for this question gets a negative reason text.

Reason Templates

The reason templates can help to find a suitable reasoning text. By clicking on 'Use a template,' you can select the most suitable reasoning texts out of a list of template examples.

These examples illustrate how the reason variables can be used. Once confirm is clicked, the selected template text replaces the text in the reason text input field.



Reason Variables

Reason Variables can be used to enrich your reason texts with dynamic values, depending on the product data and/or the user input. Reason Variables can simply be added into your texts using the notation shown in the list below. Check the lists of applicable variables to understand the different use cases for each reason variable. (see Reasoning Use case below)

Variable List

Variable	Description	Conditions	User Selection	Product Value	Example Template	Example
$matching	Displays all user-selected Answer Options of the associated Question, for which the given product fulfills the requirements defined by the data bindings.	Non	HDMI, DVI, VGA	HDMI, VGA	supports $matching	supports HDMI, VGA
$nonmatching	Displays all user-selected Answer Options of the associated Question, for which the given product **does not** fulfill the requirements defined by the data bindings.	Only for negative Reasons	HDMI, DVI, VGA	HDMI, VGA	no support for $nonmatching	no support for DVI
$remaining	Displays all Answer Options not selected by the user of the associated Question for which the given product does not fulfill the requirements defined by the data bindings.	Useful, if the product value contains multiple values	HDMI, DVI	HDMI, DVI, VGA	supports $matching (also provides: $remaining)	supports HDMI, DVI (also provides: VGA)
$unit	Displays the unit or currency of a numeric value configured for the associated question. You can set this unit Stepping Configuration - Unit.	For questions with numerical options	100	99	$value $unit	99 €

$userRangeMin / $userRangeMax	Define a range, selected by the user.	For questions with numerical options **with** a range selection. ***Please set the Answer Option Type:*** Continuous numeric Activate: Range selectable	250 / 600	500	The SSD storage capacity of the laptop is in the defined range of $userRangeMin to $userRangeMax giga byte	The SSD storage capacity of the laptop is in the defined range of 250 to 600 gigabyte
$uservalue	Displays all user-selected Answer Options of the associated Question.	Non	HDMI, DVI	HDMI, DVI, VGA	supports $uservalue	supports HDMI, DVI
$value	Displays all Answer Options that are fulfilled by the product.	Non	HDMI, DVI, VGA	HDMI, VGA	supports $value	supports HDMI, VGA
$valueRelevantFirst	Displays all Answer Options that are fulfilled by the product. Answer Options requested by a user will be shown first in the list.	Non	HDMI, DVI, VGA	HDMI, VGA	supports $valueRelevantFirst	supports HDMI, VGA, DVI

Applicable use cases for Reason Variables

Variable	Question			Answer	
	positive	**negative**	**unknown**	**positive**	**negative**
$matching	✓	✗	✗	✓	✗
$nonmatching	✗	✓	✗	✗	✗
$remaining	✗	✗	✗	✗	✗
$unit	✗	✗	✗	✗	✗
$userRangeMin / $userRangeMax	✗	✗	✗	✗	✗
$uservalue	✓	✓	✓	✓	✓
$value	✓	✓	✗	✓	✓
$valueRelevantFirst	✓	✓*	✗	✓	✓*

Variable	Question			Answer	
	positive	**negative**	**unknown**	**positive**	**negative**
$matching	✗	✗	✗	✗	✗
$nonmatching	✗	✗	✗	✗	✗
$remaining	✗	✗	✗	✗	✗
$unit	?	?	?	?	?
$userRangeMin	✗	✗	✗	✗	✗
$userRangeMax	✗	✗	✗	✗	✗
$uservalue	✓	✓	✓	✓	✓
$value	✓	✓	✗	✓	✓
$valueRelevantFirst	✗	✗	✗	✗	✗

Variable	Question			Answer	
	positive	**negative**	**unknown**	**positive**	**negative**
$matching	✗	✗	✗	N.A.	N.A.
$nonmatching	✗	✗	✗	N.A.	N.A.
$remaining	✗	✗	✗	N.A.	N.A.

$unit	?	?	?	N.A.	N.A.
$userRangeMin	✓	✓	✓	N.A.	N.A.
$userRangeMax	✓	✓	✓	N.A.	N.A.
$uservalue	✓	✓	✓	N.A.	N.A.
$value	✓	✓	✗	N.A.	N.A.
$valueRelevantFirst	✗	✗	✗	N.A.	N.A.

Variable	Question			Answer	
	positive	**negative**	**unknown**	**positive**	**negative**
$matching				N.A.	N.A.
$nonmatching				N.A.	N.A.
$remaining				N.A.	N.A.
$unit				N.A.	N.A.
$userRangeMin				N.A.	N.A.
$userRangeMax				N.A.	N.A.
$uservalue				N.A.	N.A.
$value				N.A.	N.A.
$valueRelevantFirst				N.A.	N.A.

Question Use case

These use cases for the settings for the Question help you to understand the presented settings.

Answer Option Use case

These use cases for the settings for the Answer Option help you to understand the presented settings.

Reason Texts

Positive Text	For example, let's assume that the customer wants to have a bike with carbon brakes and some recommended bikes have these brakes. Then the product recommendation card contains a positive feedback about this feature. As default, the text **"Supported: carbon brakes"** is displayed. This text is OK but of course very generic. That is why you are able to individualize this text to match the topic or environment of the displayed information. So the text could be: **"This bike has carbon brakes."**
Negative Text	So let's adapt the example above and assume that a bike does not have the desired carbon brakes. In this case, you can enter the text **"Unfortunately, this bike does not have $uservalue"** which results into the product reason text **"Unfortunately, this bike does not have carbon brakes."**
Unknown Text	A possible text could be **"There is no information about the brake type."**

Reason Variables

Reason Variables

Possible specific texts:

- **Carbon is the material of the brakes**
- One battery is contained

For example, you have a specific text for this topic, but you also have the problem that this text does not match with aluminum or steel brakes. With the aid of these variables you can match different answers. So if you enter the text **"The bike has $uservalue"** the contained variable will be replaced by the text of the Answer Option label which the user has selected.

Possible results:

1. User selects *carbon brakes* **"The bike has carbon brakes"**
2. User selects *steels brakes* **"The bike has steel brakes"**
3. User selects *aluminum brakes* **"The bike has aluminum brakes"**
4. Etc. ...

- Two batteries are contained