

Improving Search Relevancy:

GOING BEYOND YOUR DATA



EmpathyBroker

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At EmpathyBroker we believe that search is more than just a simple match against a product catalogue. It should go deeper and be more relevant, meaningful and personalised. That's why our approach combines and integrates three different techniques.

TECHNIQUE #1

Text Relevancy

Each product within a catalogue contains attributes; descriptive fields such as name, title and so on, which are used to produce a scoring model. This is the weight that the engine gives to each of the product fields when a match happens. The standard relevancy scoring depends on how many times the query occurs in the match field as well as the number of words that the field contains.

For example, if a customer is looking for a t-shirt and there is one product which has three words within the descriptive field such as "oversized white t-shirt" and another product where the name contains only the keyword "t-shirt" then the second product will have a higher relevancy scoring than the first.

This is just the basics. With EmpathyBroker's Equalize tool, merchandisers or product managers can modify the relevancy of products themselves through a dashboard. So, if say, it's known that the "name" field within the feed is super accurate for the description of a product, the field weightings can be manually modified so that the relevancy against this field is increased, therefore improving the performance and accuracy of the results.



T-shirt

RELEVANCY SCORING

Oversized
White
T-shirt



TECHNIQUE #2

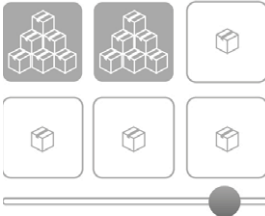
Business Rules

It's important for product owners to be in control of their products and catalogue, managing, controlling and driving the results on the grid. That's why EmpathyBroker not only allows customers to modify the Text Relevancy but they can also create Business Rules.



Product owners can personally weight products, giving some more relevancy over others so that they appear higher on the results page

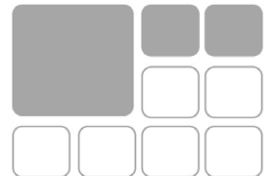
Stock levels



Seasonal Products



Adaptative grid



For example, in-stock products or those with high stock levels can be selected over those that are out of stock or low on stock.

Items with seasonal or promotional offers can appear above normal items. It can even be used to select certain

categories, like Women say, over others, such as Men or Kids.

This tool not only gives merchandisers and product owners control but also the flexibility to adapt the catalogue display and grid position fluidly and fittingly.

Signal Processing

This is a technique that involves the analysis, synthesis, and modification of signals, broadly defined as functions that convey information about the behaviour or attributes of a certain phenomenon, in this instance searches.

EmpathyBroker understands the importance of the context of a query, not just the context of the user which is a different approach related to personalization. By using signal processing, the search engine is able to understand, based on the user's search and similar search behaviours, the user's intent and what they're likely to look for next. The technology essentially learns from collective search behaviour to anticipate a user's aspirations and produce self-learning relevancy tuning.



By storing all the clicks and add-to-cart data around a query and applying this intelligence to create a mapping structure, the software is able to employ more relevancy to some products, categories or brands over others, as well as being able to modify the scoring relevancy of these products.

As the results are based on aggregated, anonymised data there are no privacy concerns or GDPR compliance issues. It just means that search results are more meaningful and insightful and the customer experience is more joyful.



LONDON | ASTURIAS | GALICIA