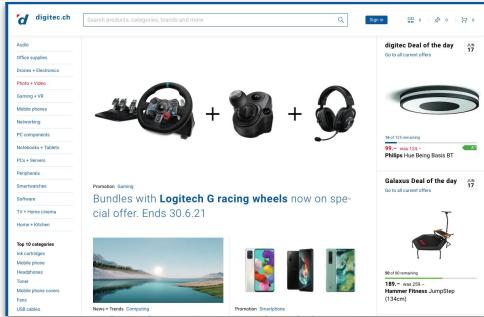


Case study

Autocomplete Search Suggestions

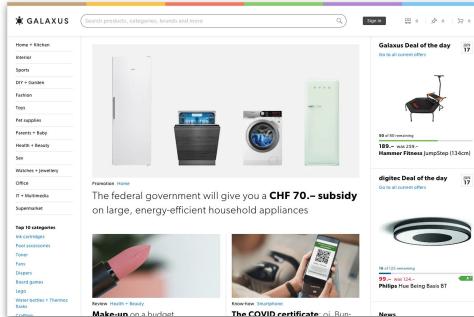
Dominic Bestler, Product Manager Search
MICES 2021

About Digitec Galaxus



digitec.ch
Consumer electronics

2001



galaxus.ch
«pretty much everything»

2012

galaxus.de

2016

Marketplace

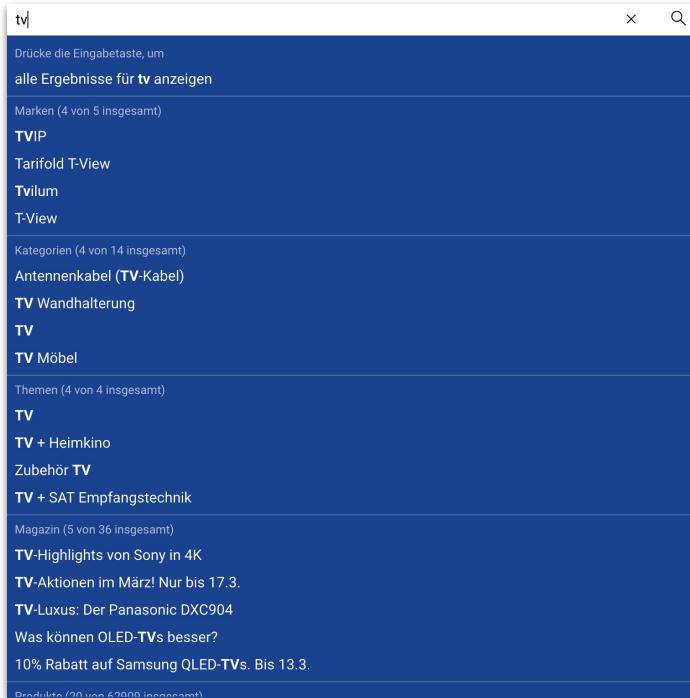
2018

2021

3 online shops 2 countries
4 languages 11 physical stores
3m SKUs
500k searches/day
1.8bn revenue CHF (2020)

The cause for the case

What was the problem?

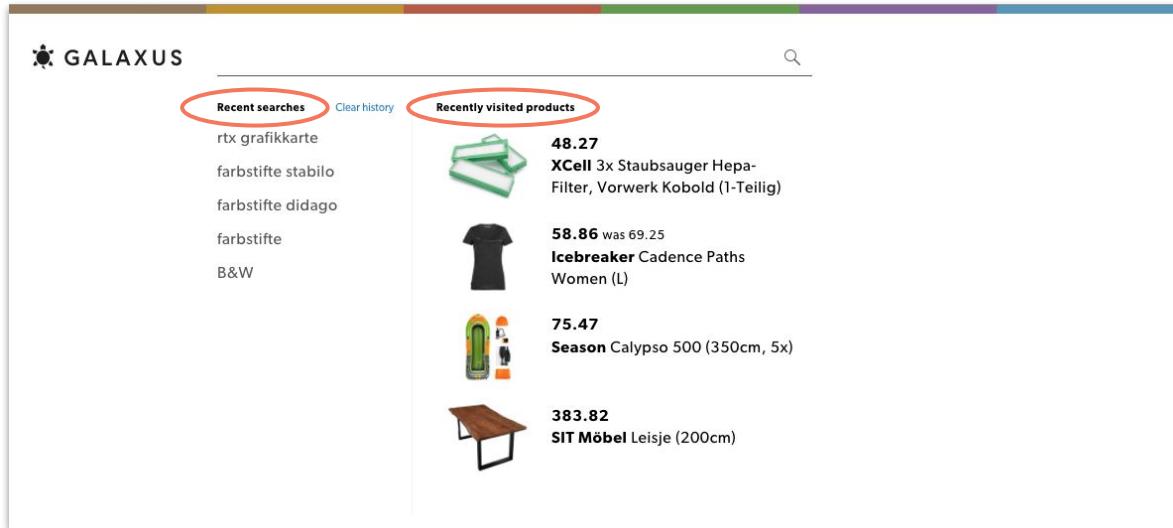


- **Too many results from different sources**
- **Very noisy:** Too much visual change as you type
- Hard to find relevant results (**high cognitive load**)
- Especially **cumbersome on mobile devices**

**How can we help users
to formulate better queries?**

What did we do?

> Help the users to NOT formulate a query



Shortcut for re-visits:
Recent searches &
Recently visited products

Learnings:
*Clicks on **Recently visited products** have the highest Session-CVR compared to all clicks within the search box.*

How to help formulating better queries?

Redesigned & reduced

“Don’t make me think”

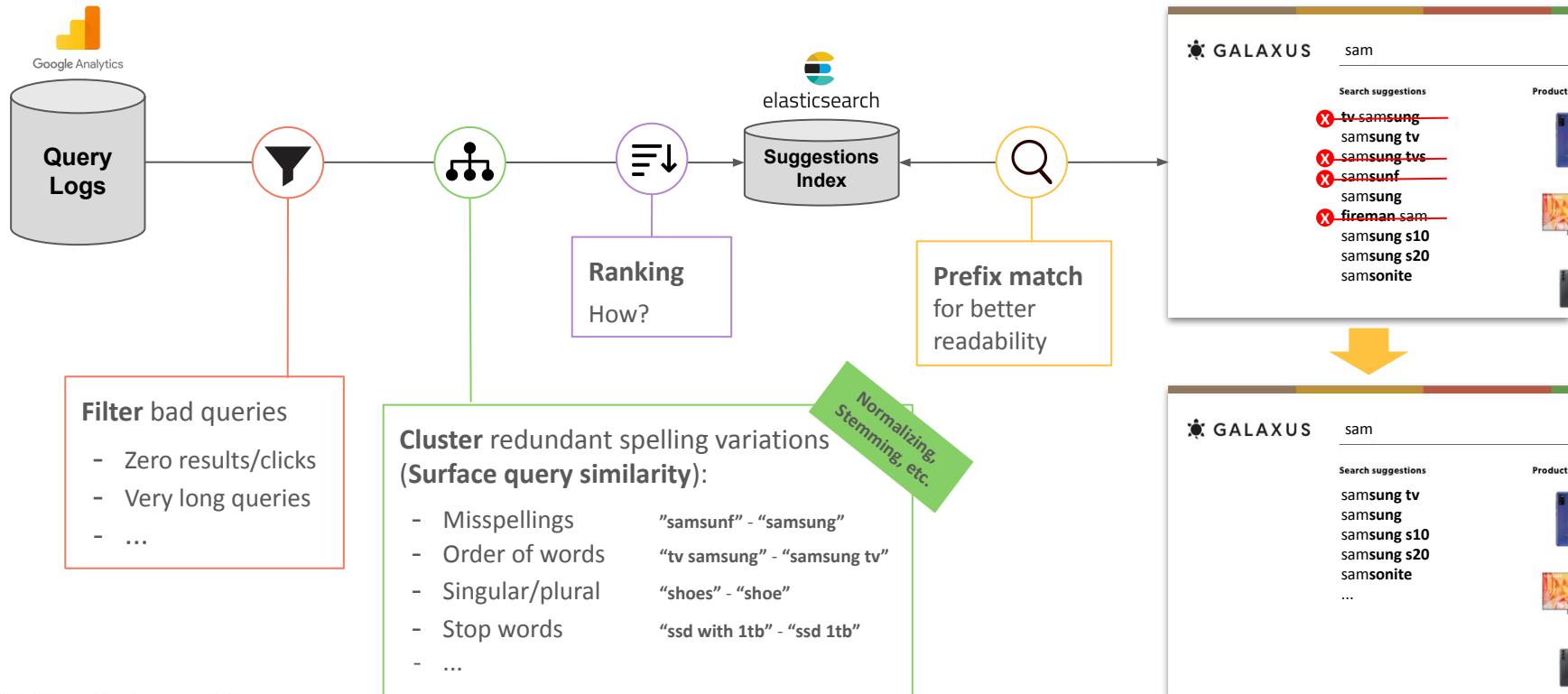
Show autocomplete suggestions to

- assist and guide to better queries
- help with domain terminology
- inspire about the types of queries



Autocomplete Suggestions from
popular and well performing search queries

Step 1: Generate & retrieve suggestions



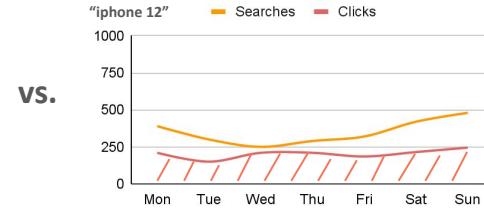
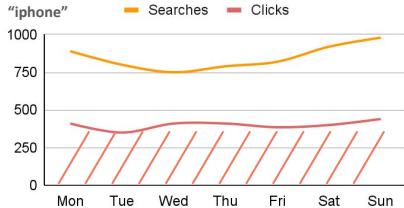
Step 2: Rank the suggestions



Popularity: Searches Performance: Clicks CTR CVR Revenue ...

Our approach:

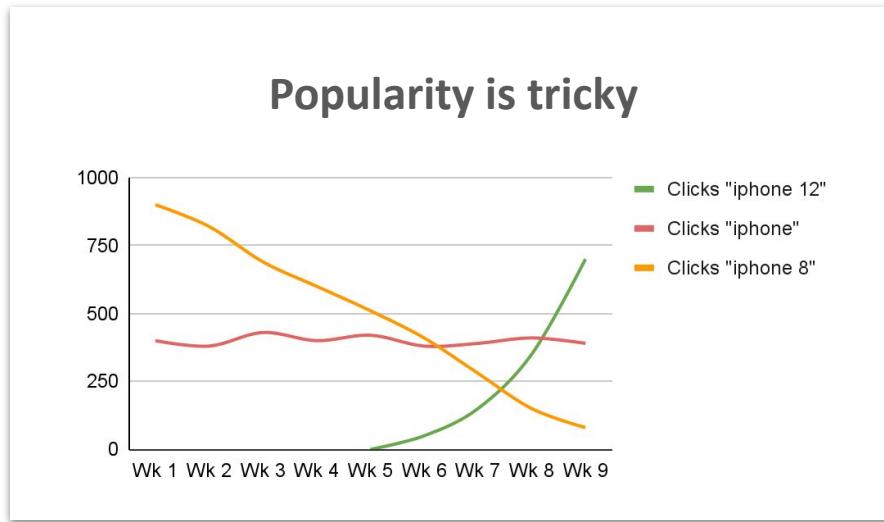
$$\sum \text{Clicks} \Rightarrow \sum \text{CTR} \times \text{Searches}$$



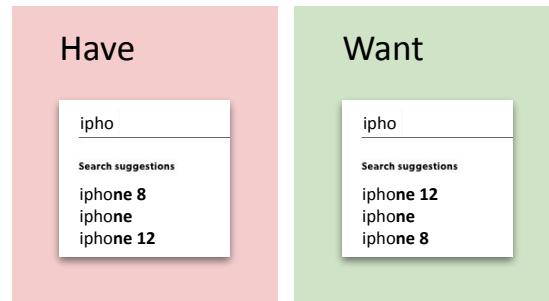
vs.

This approach puts **more weight**
on popularity than on performance.

Step 3: React to trends and seasonal searches



Wk 9
New iPhone 12 released



How sensitively should we react to trends?

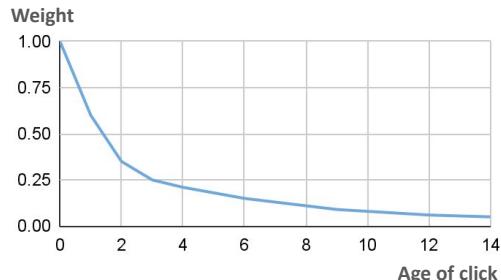
How to **balance** different types of popularities?

Step 3: React to trends and seasonal searches

Our approach:

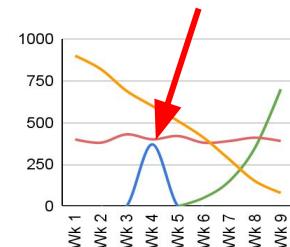
Penalize past clicks (exp. decay)

$$\sum \text{Clicks} \times \text{Weight}$$

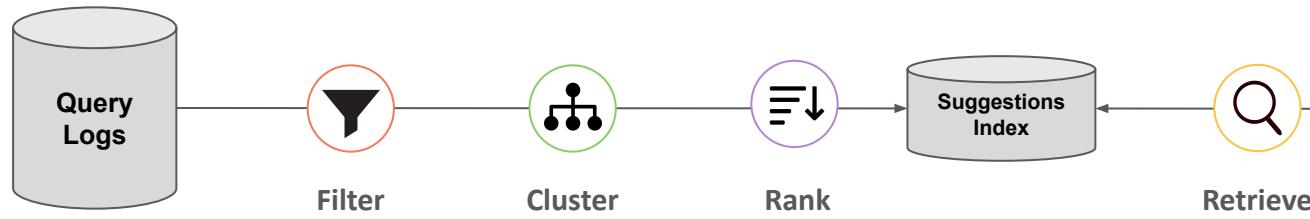


- Simple and effective
- Doesn't deal well with less popular but relatively steep trends
- ... and if they end abruptly

> Ready for further experimentation



Recap: All ingredients are in place





What did we learn?

Conclusions: Key metrics perform better

Variant A

Variant B

The image shows two side-by-side screenshots of the Galaxus search interface. Variant A on the left displays a search results page for 'mi' with a sidebar containing categories like HAUSHALT, WOHNEN, DO IT + GARTEN, SPORT, FASHION, SPIELWAREN, TIERBEDARF, BABY + MAMA, BEAUTY + GEÜNDHABIT, EROTIK, UHREN + SCHMUCK, and BÜRO. Variant B on the right shows a similar search results page but with a different sidebar containing categories like mikrowelle, mixer, milchschäumer, micro, milch, miele staubsauger, mini kühlenschrank, milchpumpe, micro scooter, and microwelle. Both variants show a list of products with their names, prices, and descriptions.

Higher CTR on product results

Lower 0-results rates & exit rates

Significant traffic shift to SERP

Change +20%

The image features a blue background with white text. It contains three statements: 'Higher CTR on product results', 'Lower 0-results rates & exit rates', and 'Significant traffic shift to SERP'. To the right is a line graph with 'CTR' on the y-axis and time on the x-axis. A red circle highlights a sharp increase in the CTR line, with the text 'Change +20%' written above it.

Conclusions: Simple yet effective solution

Swift

Quick to develop a
viable release candidate

Lean

Suffice to start with
tracking data from Google Analytics

**Thanks!
Any questions?**

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