

Algorithms and Choice: codebook

We deterministically assign a/b test segment based on user_id. So a single user within a single a/b test will always land on the same segment, even during multiple sessions and multiple searches.

User ID

A unique customer identifier. Technically, a cookie, scoped to the merchant store with the following features:

- Expires in 6 months
- Depends on browser instance, so customers switching from mobile (to do discovery) to desktop (to complete the purchase) will have different User IDs
- Scoped to the store, so the same customer will have different IDs on different stores

Session ID

A unique browsing session identifier. Is reset after 30 minutes of inactivity. Each user may perform multiple visits to the store, and each visit is assigned a unique session_id. When session has more than 30 minutes of inactivity, it's considered finalized, so no new activity can be added there. A new activity within the expired session will generate a new session_id.

Search ID

A unique identifier of the search session. A search session is a set of interactions with the search results, containing search page navigation (so browsing over multiple search results pages is still one search session). All following clicks, carts and purchases are attributed to a search session. Depends on the query, so different queries will always have different search IDs. A single customer can have multiple search sessions within a single browsing session (for example, by searching for different queries)

Segment

A segment name in the a/b test.

- 202004_gandalf_rel – High Attractiveness
- 202004_kilands_shuffle7 – Low Attractiveness

Query

Query string entered by the customer. May be empty, this means that the user just hit enter on the search box.

Search start / Search end

A timestamp when the current search session started and ended. If there was only a single search with no further interactions, these timestamps are the same.

Number of add-to-carts

A number of products added to cart within the current search session. Can be zero. Retailer B (Cyberphoto) did not share Add-to-cart data.

Number of clicks

A number of clicks made in the current search session. Duplicate clicks are still counted as multiple clicks.

First click rank

A zero-indexed position in the search results, where the first click was made. Can be empty if there was no click. Starts at 0, not 1, meaning zero is the first click position on the page.

First purchase rank – same but for purchase**Order value**

Order revenue: unit price in the store currency (SEK) * number of units bought. Does not take into account taxes, shipping, discounts.

Number of purchases

A number of products purchased within the current search session.

Number of searches

A number of searches made within the current browsing session. Technically it's a number of unique search ids for the current session id.

Search session length

A difference in seconds between search session start and end.

Number of products displayed to user

Scoped to the search session. A typical search results page contains 24 products or less. If customer browsed first 10 pages, then number of products will be $\sim 24 * 10 = 240$.

Number of sessions

Number of browsing sessions for the current customer. Value ≥ 2 means that it's a returning customer.

Whole session length

A length in seconds for the current browsing session. Aggregates multiple search sessions.

Time to add-to-cart

Time in seconds until the first add-to-cart event happened.

Time to purchase

Time in seconds until the first purchase event happened.

Toggled filters

Filters enabled for the current search session.

