Fraud filter feature

Vendor Portal

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Content

PART I

First Sketches & Thoughts

PROBLEM

- USERS WANT TO BE ABLE TO FILTER TRANSACTIONS WITH DIFFERENT COMBINATIONS OF ATTRIBUTES AND FILTER TYPES.

- USERS WANT TO BE ABLE TO SAVE THE FILTER COMBINATION AND RE-APPLY LATER.

POSSIBLE FILTER ATTRIBUTES

→ EMAIL SETTINGS
- POSSIBLE AGE OR EMAIL
- HOST PROVIDER
- DOMAIN

→ ORDER
- TIME
- VALUE
- DISTANCE

→ LOCATION

POSSIBLE FILTER TYPES

→ RANGE

FROM [ ] TO [ ]

OF TIME
OF DATE
OF LOCATION (FROM POINT A TO B)

→ INCLUDE / EXCLUDE

○ IS | ○ ISN'T

LOCATION / NEIGHBORHOOD

→ LESS, MORE AND EQUAL

IS LESS THAN | IS MORE THAN | IS EQUAL TO

KM RANGE
ACCOUNT AGE
VALUE OF TRANSACTION

Ideas

- SEMANTIC SEARCH WITH FREE TEXT FIELD SEARCH

- ON TOP OF THAT, ONCE USERS CLICK SEARCH BAR, A POP UP MENU WITH THE MAIN CATEGORIES APPEARS

- EDUCATIONAL TEXT APPEARS WHILE USERS INTERACT WITH IT

- ORDER OF FILTER CATEGORIES BASED ON USAGE

SEARCH
SEE SAVED FILTERS
TIP: TRY TYPING "MITTE"   [SEARCH]

SEARCH
SEE SAVED FILTERS
TIP: TRY TYPING "MITTE"   [SEARCH]
VALUE OF TRANSACTION | LESS THAN | MORE THAN | IS EQUAL TO | RANGE
LOCATION ▶
ACCOUNT SETTINGS ▶   € [40]
RISK SCORE ▶
DISTANCE ▶

SEARCH
SEE SAVED FILTERS
IS MORE THAN € 40 ⊗ TIP: YOU CAN ADD MORE   [SEARCH]
VALUE OF TRANSACTION | EMAIL ▶ | PROVIDER ○ IS ○ ISN'T
LOCATION ▶ | ADDRESS ▶ | START TYPING TO FILTER
ACCOUNT SETTINGS ▶ | USERNAME ▶ | ☑ HOTMAIL
RISK SCORE ▶ | | ☐ GMAIL
DISTANCE ▶

SEARCH
SEE SAVED FILTERS
IS MORE THAN € 40 ⊗ ISN'T FROM HOTMAIL ⊗   [SEARCH]

SEARCH
SEE SAVED FILTERS
TIP: YOU CAN ADD MORE CRITERIA TO YOUR FILTER   [SEARCH]
IS MORE THAN € 40 ⊗
VALUE OF TRANSACTION | EMAIL ▶ | PROVIDER ○ IS ○ ISN'T
LOCATION ▶ | ADDRESS ▶ | START TYPING TO FILTER
ACCOUNT SETTINGS ▶ | USERNAME ▶ | ☑ HOTMAIL
RISK SCORE ▶ | | ☐ GMAIL
DISTANCE ▶

→ OPTION WITH FILTER LABELS OUT OF THE SEARCH BOX

MAIN CATEGORIES   SUB CAT   FILTER TYPE
(IF APPLICABLE)

FIRST THOUGHTS

TL;DR   *Breaking down the problem,*
Identifying filter types and
Trying to come up with a solution

First, I broke down the problem into short sentences to be able to focus on them as the ideas would come.

Once I had the 2 problem statements, I started to think about the Filter attributes (which categories and subcategories could possibly exist) and based on them, think about the Filter types (possible ways to filter the attributes). All of that taking into account the main goal of the user on that page.

I came up with just a few to see if the types would match the attributes. Example: A distance in KM is filtered either as "more than", "less than", "equal to" or a range.

Based on that, I came up with 3 possible filter types:
Range; Less / More / Equal and Include / Exclude.

PART II

Challenges & Ideas

CHALLENGES & IDEAS

TL;DR   *Scalability, categories and subcategories*
Semantic search + traditional search

Since the data sources can increase with time, I needed to come up with a **scalable solution that could adapt for multiple categories, subcategories and ways to filter.**

Based on that, I thought about creating a filter that would allow the user to search for the attributes in two possible ways: **the traditional way and the semantic search.**

The idea is to have a search box on the page and when the user clicks on it, a pop up menu appears with the main category (traditional search) OR they can start typing something on the search bar and the system makes suggestions by showing what is possible with those words (semantic search).

The first state: The way to start filtering is to click on the text field of the search bar. Once they click, they can either type something or choose a main category of the menu.

Once users click on the main category, if the category has no subcategory, they can select the values and add to the filter. Once they have at least one value filtered, they can save the search. At anytime, they can see which filters they have saved (if they have any).

Explore

RISKY USERS · **RISKY ORDERS**

Filter

TIP: You can add more attributes to your search   Search

Is between $40 and $100 ⊗   ▮ Save filter combination   ▤ See saved filters

Value of Transaction ›	Email ›	Provider	Is	Isn't
Location ›	Address ›			
Account settings ›	Username ›			
Risk score ›				
Distance ›				

🔍 Start typing to filter

☐ Gmail
☑ Hotmail
☐ Yahoo
☐ Kangoroo

7
9%
0%
1%

SCORE DISTRIBUTION

If main category has a subcategory, it is displayed in a second column, on the left side of main categories column. Once subcategory is selected, a 3rd column appears, giving the options to be filtered. The attribute that is created becomes a label that can be deleted at any time by clicking the X.

OTHER IDEAS

- The order of the categories is dependent on the usage: the more they filter a category, the higher it is on the list.
- Users can also be able to request their own filter in case they couldn't find what they were looking for.

PART III

Solutions & Screens

Explore

▼ Filter

| TIP: Try typing "mitte" | Search |

📑 See saved filters

STATS

Average Score	🔴 91	Total	7
		Bad	29%
		Not Bad	0%
		Unlabeled	71%

SCORE DISTRIBUTION

◁ ▷ 1-7 of 7   Download list as CSV

Sort by: Sift Score ▾   ↑ ↓

Results list

Explore

▼ Filter

TIP: Try typing "mitte"   [Search]

| Value of Transaction ▸ | Is less than | Is more than | Is equal to | Is between |

Location ▸

Account settings ▸   From $ 40.00   To $ 100.00

Risk score ▸

Distance ▸   [Add]

📑 See saved filters

SCORE DISTRIBUTION

7
29%
0%
71%

◂ ▸   1-7 of 7   Download list as CSV   Sort by: Sift Score ▾   ⬆ ⬇

Results list

Explore

RISKY USERS   RISKY ORDERS

Filter

| TIP: You can add more attributes to your search | Search |

Is between $40 and $100 ✕   Email isn't from Hotmail ✕   🔖 Save filter combination   📋 See saved filters

Value of Transaction ›	Email ›	Provider	Is	Isn't
Location ›	Address ›			
Account settings ›	Username ›	🔍 Start typing to filter
Risk score ›		☐ Gmail
Distance ›		☑ Hotmail
		☐ Yahoo
		☐ Kangoroo

SCORE DISTRIBUTION

< >   1-7 of 7   Download list as CSV

Sort by: Sift Score ⌄

Results list

PROTOTYPE

I made a very basic prototype using FIGMA. I made the filter part high fidelity but the rest of the page I didn't redraw from the screenshot. It doesn't allow you to do everything, just a specific flow which is:

- Click on search bar;
- Select "Value of Transitions";
- Select "Is between"
- Click on ADD
- Click again on the search bar;
- Click on Account Settings
- Click on Email
- Click on hotmail

Prototype link

How to test if it is a success

METRICS

The goal of the filter is to explore fraud cases and check patterns that can be flagged as fraud.

Without the filter, users might have to spend a lot of time going one by one and making a decision on each case.

With the new filtering system, it's expected that the user can find those patterns quicker and therefore, make a decision quicker.

A good way to measure the success could be measuring the **amount of fraud cases they could make a decision on in a certain period of time. (Cases per day / Cases per month).**

In the long run, once the Fraud data model is improved based on the new patterns that were found, another way to measure will be to **measure the amount of money saved by preventing new fraud cases.**

PART V

Still to be done

TO
BE
DONE

MOBILE VERSION I made the solution on desktop, but I know that things should be responsive and that a filtering system like this can be quite challenging to implement on mobile. I didn't have time to draw the mobile solution, but it would be an overlay filter that would slide from the left side. It would allow users to filter on the same way they do on the desktop and all the functionalities would exist.

THE SAVE FILTER / USE SAVED FILTER FLOW Because of time, I didn't have time to create the "save filter" flow.
The "Save filter" could open a modal where users could add a name to the combination of filters. This would then go to the "saved filters". The "use saved filters" flow would be on page, it could expand the filter area with all saved filters and the user could apply them at anytime.