Data Table - Column Filter PRD

Purpose

Enable users to filter the modern data table by defining column value thresholds in the UI.

Background and Strategic Fit

Column filters will be useful to all users looking to derive insights from the data table. This feature move the modern data table towards achieving critical feature parity with the classic data table, enabling [PRODUCT] to sunset the classic data table - saving infrastructure, development and QA resources.

Column filters exist in the classic data table, but they're subject to several shortcomings. These issues include, but are not limited to:

- The filterable metric list is long and metric search and selection process proves to be a poor user experience
- Threshold value text entry boxes do not accept units or inform the user on units, i.e. 40% is not an acceptable input and % is not prompted It is unclear which filters are being applied once you close the tool, you must re-open the tool to check on your filters
- Filtering to a specific band of values, i.e. 40% - 60% is click intensive
- Filters may not be applied even when you click the apply button if there are empty value boxes present

The modern data table column filters will address these shortcomings and expand functionality to make data insights via the data table more accessible than ever before.

Links

New Data Table Feature Roadmap

Example Column Filter

Target Users

- [PRODUCT] Clients
- All internal personas that use the data table may benefit from the column filters.

Assumptions

- Column filters are to remain as client side functionality that require no development work from the backend or API teams
- Column filters are typically not utilized in place of a search or filter where clients are hunting for specific data rows

- Column filters are utilized to quickly filter out noise or identify outliers for data insight, exporting, or research purposes

Use Cases

- As a [PRODUCT] client, I want to filter a single column to only display data above a specific threshold so I can view my most or least impactful labels

- As a [PRODUCT] client, I want to filter a single column to display only data below a specific threshold so that I can view my most or least impactful labels

- As a [PRODUCT] client, I want to filter a single column to a specific band of values (minimum and maximum are both defined) to remove outliers for a report

- As a [PRODUCT] client, I want to filter multiple columns in the previously described ways in order to answer a specific research question about my dataset

- *As a [PRODUCT] client, I want to filter the data table by defining thresholds of a metric that are not currently included in the data table view*

Success Criteria

- Column filter functionality is clearly differentiated from query filter functionality

- Column filters are easy to find in the UI

- Column filters are clearly visible when activated

- Column filters are easy to clear, both at the individual and all filter level

- Column filters are highly performant (do not require a database query)

- If a column filter is applied but the data table view has not changed, it is clear to the user that a filter is in effect none-the-less.

- It is clear to the user the units of the value that are being filtered (% or #)

- There is no confusion to the user as it if they should include a % after their percentage value or not

- Multiple column filters may be applied at once

- Column filters accept minimum, maximum, and both minimum and maximum inputs

User interaction and design

Questions

Question	Outcome
Are column filters to remain client side?	
How useful is it to filter a dataset by metrics that are not columns present in the current view?	
Are metrics that are not presently visible to the user already loaded from the database or are we conducting a new query each time a column is added / removed from the visible data table?	Metrics that are not visible have already been loaded from the database
Is it possible to indicate that a column is being filtered in the column header?	
How can we clearly denote the difference between server side query filters & searches, and client side data table filters & sorts in the UI?	
Is it reasonable to only show filter options for metrics that are included in or relevant to the current view? Unsure of how much data is already loaded that is not being displayed	

Not Doing