DASHBOARD 2 MANUAL

Coding-free Market Basket Results

Abstract

This document explains the features and functions of Dashboard 2. Includes terminology used as well as instructions for searching and filtering.

Team Basket

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DASHBOARD VOCABULARY:

Pairing Number: This is an ID number referring to a specific pairing in the dataset. Each pairing result made from Apriori was given an ID number to make referencing between the different dashboard features easier to identify.
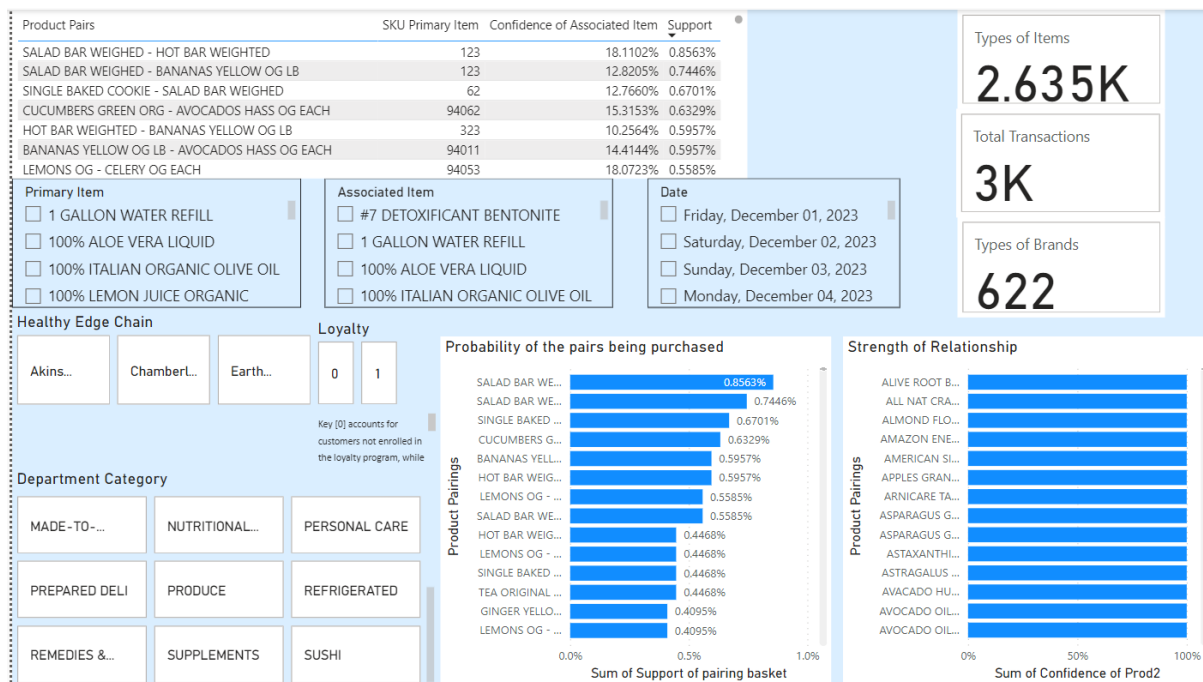
Confidence: This is the (default) primary measure of the dashboard. This value indicates if the second basket item will be purchased if the first basket item is already present. It shows the strength of the market basket relationship. The higher the value, the stronger the relationship between those items.

Support: This is the secondary measure of the dashboard. This value represents the fraction of purchases containing a market basket pairing. If the number is greater, that indicates that a pairing is purchased more often. In other words, the frequency of the purchase within the dataset.
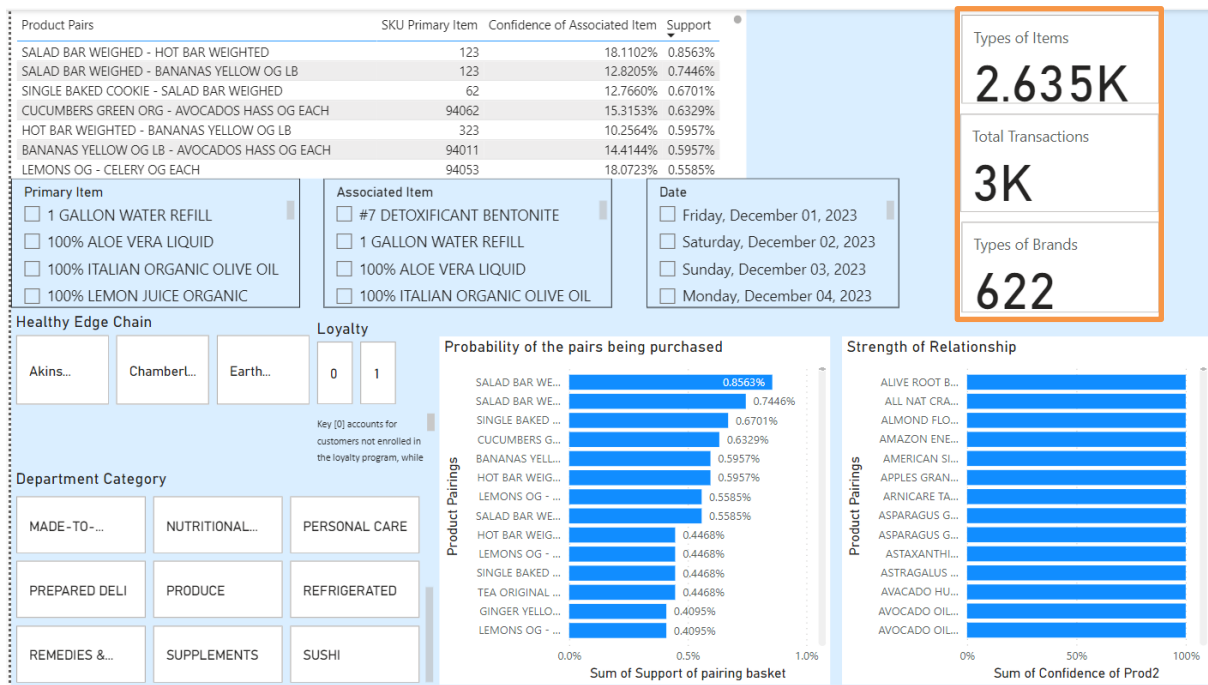
Primary Item: This is the first item in the Market Basket Pairing. This is the item that is purchased first in the store setting.

Associated Item: This is the second item in the Market Basket Pairing. This is the item purchased after the first item is purchased, and by viewing the metric values we can see its relationship to the primary item.
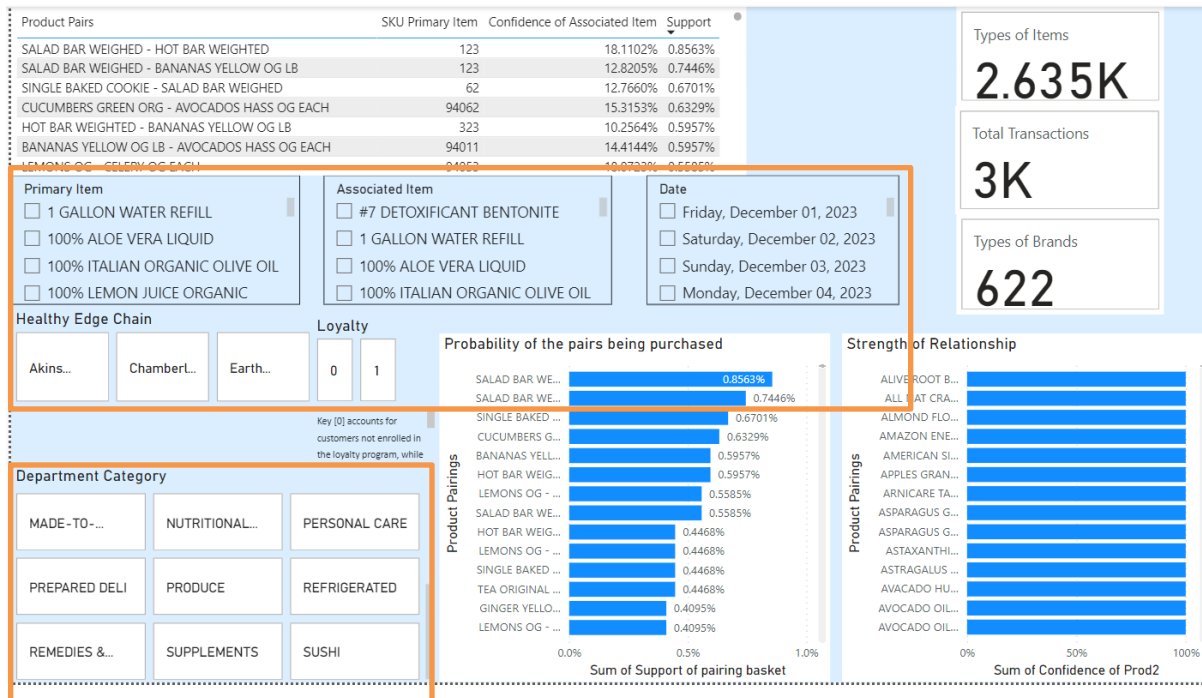
Dashboard Overview

Key indicators Explanation

Product Pairs	SKU Primary Item	Confidence of Associated Item	Support
SALAD BAR WEIGHED - HOT BAR WEIGHTED	123	18.1102%	0.8563%
SALAD BAR WEIGHED - BANANAS YELLOW OG LB	123	12.8205%	0.7446%
SINGLE BAKED COOKIE - SALAD BAR WEIGHED	62	12.7660%	0.6701%
CUCUMBERS GREEN ORG - AVOCADOS HASS OG EACH	94062	15.3153%	0.6329%
HOT BAR WEIGHTED - BANANAS YELLOW OG LB	323	10.2564%	0.5957%
BANANAS YELLOW OG LB - AVOCADOS HASS OG EACH	94011	14.4144%	0.5957%
LEMONS OG - CELERY OG EACH	94053	18.0723%	0.5585%

Primary Item
- ☐ 1 GALLON WATER REFILL
- ☐ 100% ALOE VERA LIQUID
- ☐ 100% ITALIAN ORGANIC OLIVE OIL
- ☐ 100% LEMON JUICE ORGANIC

Associated Item
- ☐ #7 DETOXIFICANT BENTONITE
- ☐ 1 GALLON WATER REFILL
- ☐ 100% ALOE VERA LIQUID
- ☐ 100% ITALIAN ORGANIC OLIVE OIL

Date
- ☐ Friday, December 01, 2023
- ☐ Saturday, December 02, 2023
- ☐ Sunday, December 03, 2023
- ☐ Monday, December 04, 2023

Types of Items

2.635K

Total Transactions

3K

Types of Brands

622

Healthy Edge Chain

Akins...	Chamberl...	Earth...

Loyalty

0	1

Key [0] accounts for customers not enrolled in the loyalty program, while

Department Category

MADE-TO-...	NUTRITIONAL...	PERSONAL CARE
PREPARED DELI	PRODUCE	REFRIGERATED
REMEDIES &...	SUPPLEMENTS	SUSHI

Probability of the pairs being purchased

Product Pairings	Sum of Support of pairing basket
SALAD BAR WE...	0.8563%
SALAD BAR WE...	0.7446%
SINGLE BAKED ...	0.6701%
CUCUMBERS G...	0.6329%
BANANAS YELL...	0.5957%
HOT BAR WEIG...	0.5957%
LEMONS OG - ...	0.5585%
SALAD BAR WE...	0.5585%
HOT BAR WEIG...	0.4468%
LEMONS OG - ...	0.4468%
SINGLE BAKED ...	0.4468%
TEA ORIGINAL ...	0.4468%
GINGER YELLO...	0.4095%
LEMONS OG - ...	0.4095%

Strength of Relationship

Product Pairings	Sum of Confidence of Prod2
ALIVE ROOT B...	
ALL NAT CRA...	
ALMOND FLO...	
AMAZON ENE...	
AMERICAN SI...	
APPLES GRAN...	
ARNICARE TA...	
ASPARAGUS G...	
ASPARAGUS G...	
ASTAXANTHI...	
ASTRAGALUS ...	
AVACADO HU...	
AVOCADO OIL...	
AVOCADO OIL...	

The card visuals, located at the top right side of the dashboard, display key facts about the scale of transactional data subsets derived from the portfolios.

Filtering

Product Pairs	SKU Primary Item	Confidence of Associated Item	Support
SALAD BAR WEIGHED - HOT BAR WEIGHTED	123	18.1102%	0.8563%
SALAD BAR WEIGHED - BANANAS YELLOW OG LB	123	12.8205%	0.7446%
SINGLE BAKED COOKIE - SALAD BAR WEIGHED	62	12.7660%	0.6701%
CUCUMBERS GREEN ORG - AVOCADOS HASS OG EACH	94062	15.3153%	0.6329%
HOT BAR WEIGHTED - BANANAS YELLOW OG LB	323	10.2564%	0.5957%
BANANAS YELLOW OG LB - AVOCADOS HASS OG EACH	94011	14.4144%	0.5957%

To apply filters, click on the corresponded box associated with the metric wanted. Filters are open to combinations and can be applied and altered to change what kind of information the dashboard displays.

The filtering options include:

- Primary Item
- Associated Item
- Primary Item Category
- Chain Name
- Loyalty
- Department Category
- Date

Let's go through these options in detail. To extend for advanced alternation of any filter, click the name of the filter or the arrow by it's name from the filter's pane on righthand side.

Primary Item Filter

 This allows filtering by specific items within the Primary Item column of the dataset. The user can select the specific products they would like to see on the dashboard, search for a specific product (given it is in the dataset) to display dashboard results, or can exclude a product from the dashboard. Exclusion can be performed by checking the box for "Select All", then unchecking the box of the item to be excluded.
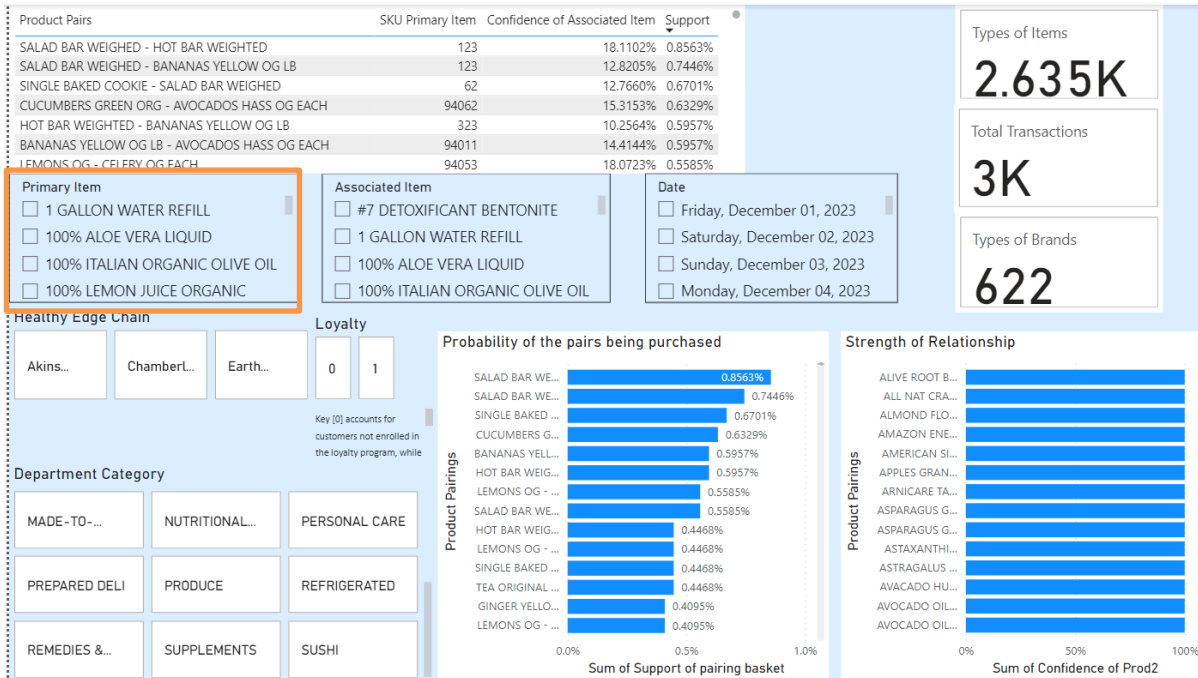
Associated Item Filter

Essentially the same features as the Primary Item filter, but refers to the associated item. This allows filtering by specific items by specific items within the Associated Item column of the dataset. The user can select the specific products they would like to see on the dashboard, search for a specific product (given it is in the dataset) to display dashboard results, or can exclude a product from the dashboard. Exclusion can be performed by checking the box for "Select All", then unchecking the box of the item to be excluded.
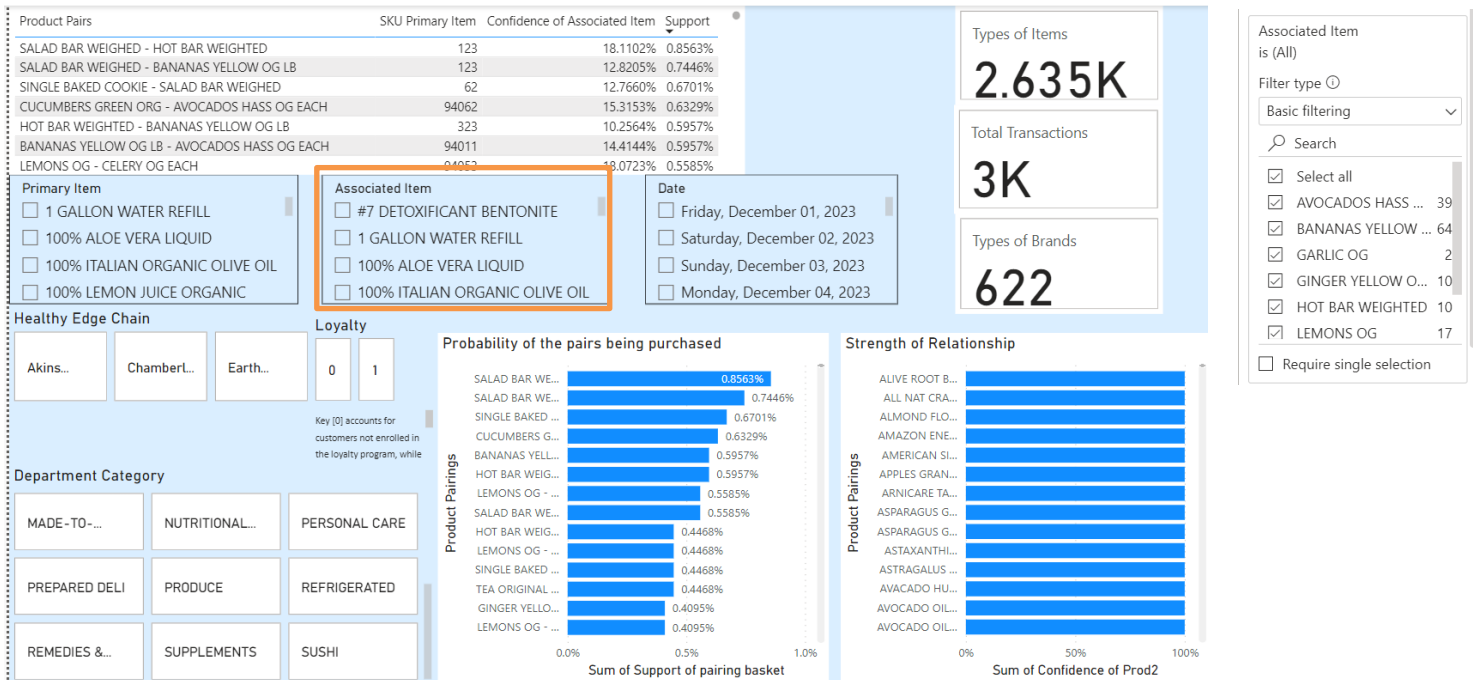
Confidence Filter

Drag the Column "Confidence of Prod2(Associated Item)"
or "Confidence of Prod1(Primary Item)" from Data pane into the Filter pane.
This filter allows the user to filter by confidence.
There is a top N filter here.

Under "Show Items", user can adjust whether they want to see the Top or Bottom values in the first box. Selecting "Top" will show pairings in the dashboard with the Top Confidence values. Selecting "Bottom" will show pairings in the dashboard with the Bottom (or lowest) Confidence values.

The second box allows the user to change how many pairings they want to see according to the first box. For example, typing in a 5 in the current setting would show the top 5 product pairings according to confidence. Typing in a 6 would show the pairings with the top 6 highest confidence.

End by clicking "Apply Filter" in order to apply the filter to the dashboard.

To hide this filter when using other filters, select "hide" to the right of the eraser icon:

Support

Drag the Column "Support of pairings" from Data pane into the Filter pane.
This filter allows the user to filter by support values. The filter type is currently set to "Advanced filtering".

The user can click the first box to select relativity and they can type in a value into the second box to filter what types of support values they'd like to see.

You can also add a second value in the second value for further filtering.

Department Category

This filter allows the user to check specific categories of the primary item across the dashboard. Once selected, only item pairings within primary items affiliated to those categories will be displayed. This filter is instrumental in examining item performance and trends within particular segments of the store.
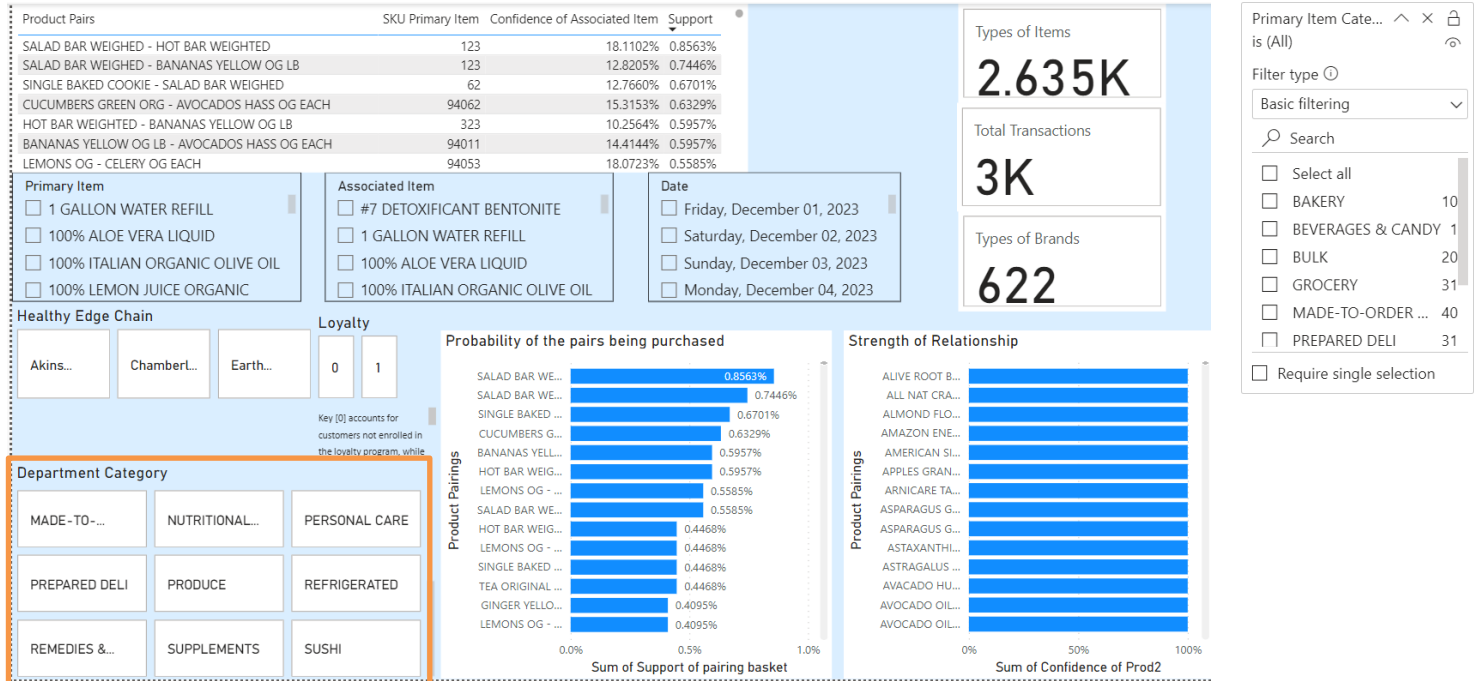
Loyalty Status Category

This allows filtering by specific items purchased only by loyal or casual consumer across the dashboard. Once selected, only item pairings purchased under specified loyalty status will be displayed. This helps in crafting personalized marketing and loyalty programs.
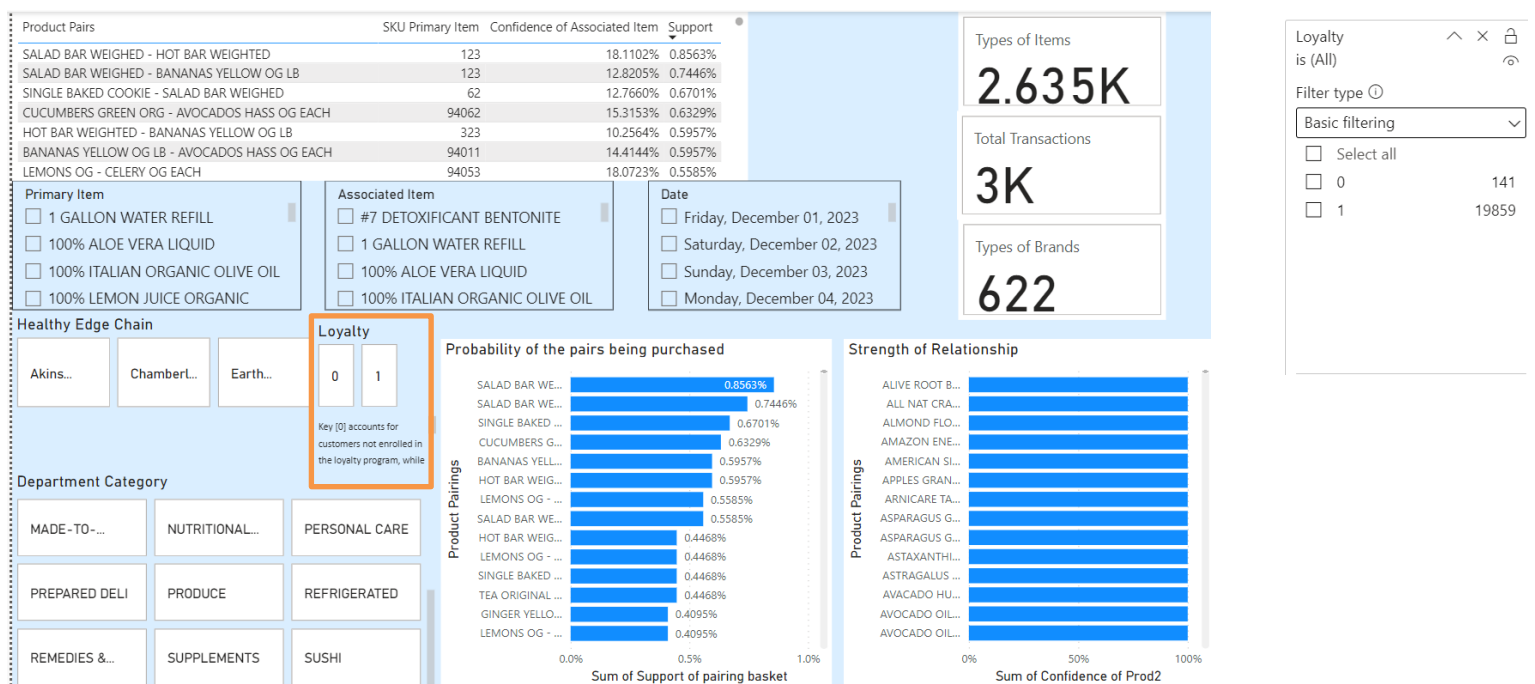
Chain Category

This filter allows the user to check specific item distributed under the specified chain store across the dashboard. Once selected, only item pairings within items affiliated to those stores will be displayed. This is useful for analyzing performance and customer buying patterns at different store locations.

Date Category

This filter allows the user to filter a range of dates on the occurrence of the primary item's transaction across the dashboard. Once selected, only item pairings within primary items purchased within those dates will be displayed. This is crucial for seasonal performance assessment and planning.
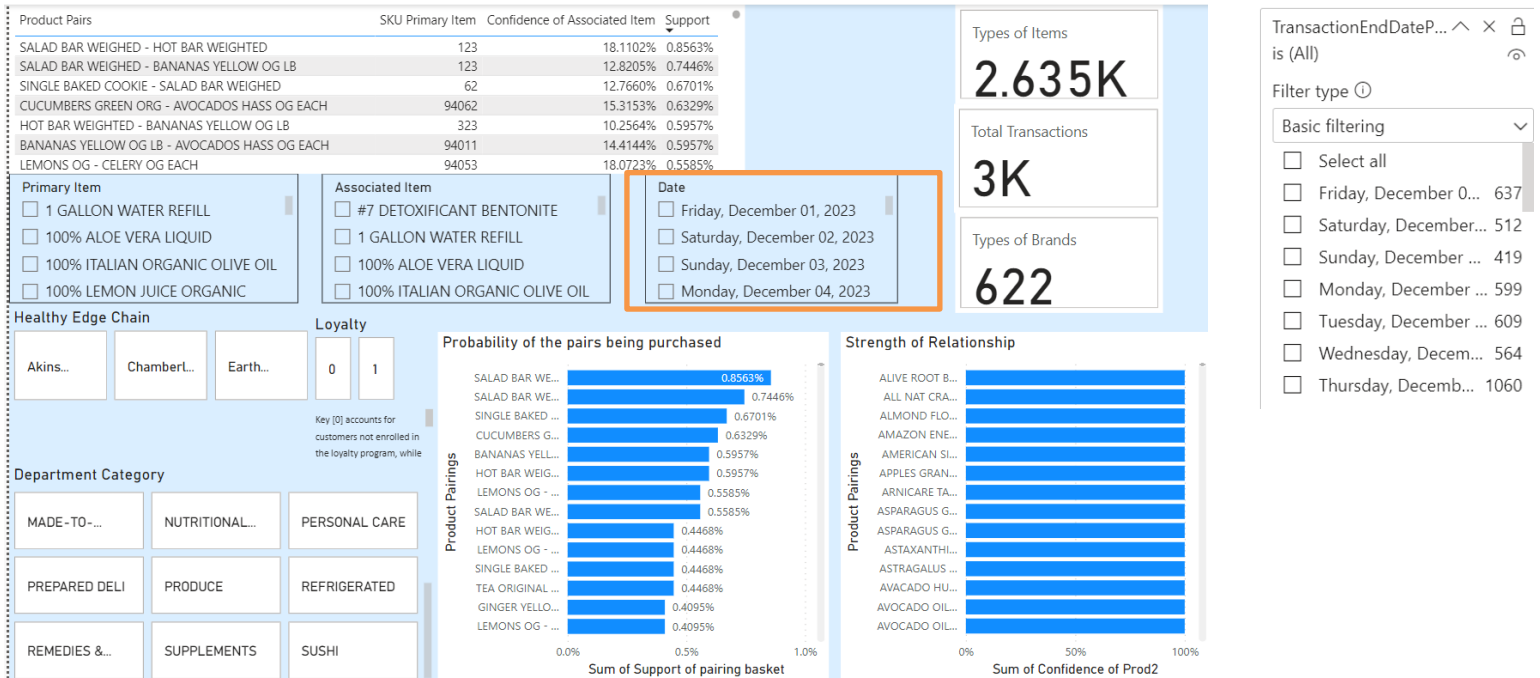
Market Basket Table Usage

By clicking the arrow under Support, the table can be organized by support in ascending or descending order.

Market Basket Relationships

Item Pairing	Primary Item	Associated Item	Confidence	Support
29	BERRIES BLUEBERRIES OG	BANANAS YELLOW OG LB	0.50	0.01
17	AVOCADOS HASS OG EACH	BANANAS YELLOW OG LB	0.48	0.01
61	CUCUMBERS GREEN ORG	BANANAS YELLOW OG LB	0.48	0.01
78	GARNET YAM ORNG-RED ORG	BANANAS YELLOW OG LB	0.48	0.01
40	CELERY OG EACH	BANANAS YELLOW OG LB	0.47	0.01

By clicking the arrow under Support, the table can be organized by support in ascending or descending order.

Clicking any pairing in the table will alter the other visuals on the dashboard. To undo the selection, simply unclick the pairing in the table.