Basket Direct Connect

About

Rather than a set of tables, our Basket Direct Connect product is packaged as a suite of stored procedures. This architecture serves the following purposes:

1. Ensure anonymity for our Retail Data Sharing partners by masking location-level data
2. Easily serve up pre-calculated metrics that would otherwise be difficult to query

BASKET

Overview

The BASKET procedure is built to flexibly deliver the following measures at any desired granularity, from total market level to individual product level:

- Daily Baskets per Store
- Items per Basket
- Dollars per Basket
- Units per Basket
- Single Item Basket %
- Multi-Item Multi-Category Basket %
- Multi-Item Single Category Basket %
- Basket Penetration
- % of Basket Dollars
- % of Basket Units

Calling the stored procedure

```
call WAREHOUSE.BASKET(
    DATE_RANGE ARRAY, --Required. Start date and end date as ['YYYY-MM-DD','YYYY-MM-DD']
    DATE_GRANULARITY VARCHAR, --Required. Options: ("day","week","month","quarter","year")
    MED_OR_REC VARCHAR, --Required. Options: ("med","rec","both")
    GROUPING_ATTRIBUTES ARRAY, --Nullable. array of product attributes, including any categorical attributes**
    FILTERS VARIANT, --Nullable. All desired filters formatted as [{'[Categorical Attribute** 1]':['value 1','value 2'...]},...,{'[Numerical Measure*** 1]':[[min value], [max value]]},...].
    CATEGORY_CROSS_LEVEL VARCHAR --Nullable default 'LEVEL_01'. Options:
```

```
('LEVEL_01','LEVEL_02','LEVEL_03','LEVEL_04','LEVEL_05')
)
```

**see Categorical Attributes
***see Numerical Measures

Stored procedure output

Column Name	Data Type	Description
PERIOD	DATE	First day of date period, with granularity defined by the DATE_GRANULARITY parameter
STATE	VARCHAR	US state
[grouping attributes]		These columns will match the columns specified in the GROUPING_ATTRIBUTES parameter
DAILY_BASKETS_PER_STORE	FLOAT	Average number of daily baskets at each location including a product with the grouping attributes
ITEMS_PER_BASKET	FLOAT	Average number of items in each basket including a product with the grouping attributes
DOLLARS_PER_BASKET	FLOAT	Average number of dollars in each basket including a product with the grouping attributes
SINGLE_ITEM_PCT	FLOAT	Percent of relevant baskets with only one item
MULTI_ITEM_MULTI_CATEGORY_PCT	FLOAT	Percent of relevant baskets with multiple items in multiple different categories (category level controlled by CATEGORY_LEVEL parameter)
MULTI_ITEM_SINGLE_CATEGORY_PCT	FLOAT	Percent of relevant baskets with multiple items all within the same category (category level controlled by CATEGORY_LEVEL parameter)
BASKET_PENETRATION_PCT	FLOAT	Percent of baskets in the state containing a product with the grouping attributes
PCT_OF_BASKET_DOLLARS	NUMBER(38,12)	Percent of relevant basket dollars made up by products with the grouping attributes

PCT_OF_BASKET_ITEMS	FLOAT	Percent of relevant basket items made up by products with the grouping attributes

Examples

Example 1: Get market-wide state-by-state basket sizes in dollars and units, daily baskets per store, and breakdown of single item, multi-item multi-category, and multi-item single category transactions on LEVEL_02

Query:

```
call WAREHOUSE.BASKET(
['2024-01-01','2024-10-31'],
'year',
'both',
null,
null,
'LEVEL_02'
);
```

Example 2: Get your brand's weekly basket penetration by size of Vape, and measure what percent of baskets each one makes up on average

Query:

```
call WAREHOUSE.BASKET(
['2024-01-01','2024-01-31'],
'week',
'both',
['LEVEL_02','PACK_SIZE'],
[{'BRAND':['Stiiizy']},{'LEVEL_02':['Vape']},{'STATE':['California']}],
'LEVEL_03'
);
```

BASKET CROSS

Overview

The BASKET_CROSS procedure enables you to identify which product types sell better or worse together than they do independently. The granularity is fully customizable from category level down to full product level.

Calling the stored procedure

```
call WAREHOUSE.BASKET_CROSS(
    DATE_RANGE ARRAY, --Required. Start date and end date as ['YYYY-MM-DD','YYYY-MM-DD']
    DATE_GRANULARITY VARCHAR, --Required. Options: ("day","week","month","quarter","year")
```

```
    MED_OR_REC VARCHAR, --Required. Options: ("med","rec","both")
    GROUPING_ATTRIBUTES ARRAY, --Nullable. array of product attributes, including any
categorical attributes**
    FOCUS_FILTERS VARIANT --Nullable. All desired filters on the FOCUS PRODUCT TYPE
formatted as [{'[Categorical Attribute** 1]':['value 1','value 2'...]},...,
{'[Numerical Measure*** 1]':[[min value], [max value]]},...].
    CROSS_FILTERS VARIANT --Nullable. All desired filters on the CROSS PRODUCT TYPE
formatted as [{'[Categorical Attribute** 1]':['value 1','value 2'...]},...,
{'[Numerical Measure*** 1]':[[min value], [max value]]},...].
)
```

**see Categorical Attributes
***see Numerical Measures

Stored procedure output

Column Name	Data Type	Description
PERIOD	DATE	First day of date period, with granularity defined by the DATE_GRANULARITY parameter
STATE	VARCHAR	US state
[focus grouping attributes]		These columns will match the columns specified in the GROUPING_ATTRIBUTES parameter and pertain to the focus product type
[cross grouping attributes]		These columns will match the columns specified in the GROUPING_ATTRIBUTES parameter and pertain to the cross product type
PCT_OF_TRANSACTIONS	FLOAT	Percent of transactions in the state containing both the focus and cross product types
PCT_OF_FOCUS_TRANSACTIONS	FLOAT	Percent of transactions containing the focus product type that ALSO contain the cross product type
LIFT	FLOAT	(frequency of purchase of both focus and cross product type)/(frequency of purchase of focus product type * frequency of purchase of cross product type). Lift > 1 means the products sell better together than separately. Lift = 1 means the product types have no impact on each other. Lift < 1 means the products selll worse together than separately.

Examples:

Example 1: Identify which brands of Pre-Rolls sell the best alongside your brand's 0.5g vapes

Query:

```
call WAREHOUSE.BASKET_CROSS(
['2024-10-01','2024-10-31'],
'month',
'both',
['BRAND'],
[{'BRAND':['Stiiizy']},{'STATE':['California']},{'LEVEL_02':['Vape']},{'PACK_SIZE':
['0.5g']}],
[{'LEVEL_02':['Pre-Rolled']}]
);
```

Example 2: Identify which items sell the best alongside a sepcific high-performing item within your brand's catalog

Query:

```
call WAREHOUSE.BASKET_CROSS(
['2024-10-01','2024-10-31'],
'month',
'both',
['ITEM'],
[{'ITEM':['Stiiizy - Blue Dream - Distillate Cartridge, 1000mg, 1 Count']}],
null
);
```

Appendix

Categorical Attributes

Attribute Name	Data Type
PARENT_COMPANY	VARCHAR(255)
BRAND	VARCHAR(255)
ITEM	VARCHAR(16777216)
STRAIN	VARCHAR(255)
FLAVOR	VARCHAR(255)
TOTAL_THC	VARCHAR(255)
TOTAL_CBD	VARCHAR(255)
ITEMS_PER_PACK	NUMBER(38,0)
TOTAL_ITEM_WEIGHT	VARCHAR(30)
CONTAINS_CBD	VARCHAR(255)

CBD_RANGE	VARCHAR(255)
THC_RANGE	VARCHAR(255)
CONTAINS_CBG	VARCHAR(255)
CONTAINS_CBN	VARCHAR(255)
LEVEL_01	VARCHAR(255)
LEVEL_02	VARCHAR(255)
LEVEL_03	VARCHAR(255)
LEVEL_04	VARCHAR(255)
LEVEL_05	VARCHAR(255)
IS_LIVE_EXTRACT	VARCHAR(16777216)
PACK_SIZE	VARCHAR(16777216)

Numerical Measures

Attribute Name	Data Type
PURCHASE_PRICE	FLOAT
DOLLARS	FLOAT
UNITS	FLOAT