Regional Direct Connect

About

Rather than a set of tables, our Regional 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. Enforce our minimum location count of 3 to further protect retailer anonymity
3. Easily serve up pre-calculated metrics that would otherwise be difficult to query

REGIONAL_RETAIL_SALES

Overview

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

- Dollar Sales
- Unit Sales
- Equivalized Unit Sales
- Pre-Discount List Price
- Post-Discount List Price
- Purchase Price
- Wholesale Cost
- Availability
- % All Commodity Volume
- Share Of Shelf
- Average Items Carried
- Dollar Velocity
- Unit Velocity

Calling the stored procedure

```
call WAREHOUSE.REGIONAL_DISCOUNT_LIFT(
    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")
```

```
    INCLUDE_DELIVERY VARCHAR, --Required. Options: ("storefront and delivery",
"storefront only","delivery only")
    REGIONAL_GRANULARITY VARCHAR, --Required. options: ("country","state", "county",
"city")
    REGIONS ARRAY, --Required. array of regions*
    GROUPING_ATTRIBUTES ARRAY, --Nullable. array of product attributes, including any
categorical attributes**
    BUCKETING_ATTRIBUTE ARRAY, --Nullable. Format: [{'[bucketing attribute]':[bucket
size]}]. All numerical metrics*** are valid bucketing attributes
    FILTERS VARIANT --Nullable. All desired filters formatted as [{'[Categorical
Attribute** 1]':['value 1','value 2'...]},...,{'[Numerical Measure*** 1]':[[min
value], [max value]]},...].
)
```

*see Get Available Regions
**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
[grouping attributes]		These columns will match the columns specified in the GROUPING_ATTRIBUTES parameter
[regional attributes]		These columns will contain geographic information according to the REGIONAL_GRANULARITY parameter
[bucketing attribute]		This column will match the column specified in the BUCKETING_ATTRIBUTES parameter
DOLLARS	FLOAT	Total sales in dollars
UNITS	FLOAT	Total units sold
EQ_UNITS	FLOAT	Total grams sold for Flower and Extracts categories (at LEVEL_02). Total units sold for all other categories
DISCOUNT_PRICE	FLOAT	Post-discount menu-listed price
ORIGINAL_PRICE	FLOAT	Pre-discount menu-listed price
PURCHASE_PRICE	FLOAT	Final pre-tax price paid by the customer
COST_PER_UNIT	FLOAT	Wholesale cost
AVAILABILITY	NUMBER(38,12)	Availability as a decimal (Availabilty of 1 means 100%)
ACV	FLOAT	% All Commodity Volume as a decimal (ACV of 1 means 100%)

SOS	NUMBER(38,12)	Share of Shelf as a decimal (SOS of 1 means 100%). If category or pack_size are present in the FILTERS parameter, they will affect the market calculation (e.g. if you filter to 'Edibles', the share of shelf calculation will reflect the share within Edibles only)
AIC	NUMBER(38,12)	Average Items Carried
DOLLAR_VELOCITY	FLOAT	Velocity in dollars
UNIT_VELOCITY	FLOAT	Velocity in units

Examples

Example 1: Get weekly, city-level sales performance for each brand in a brand house. Limit to Vape only

Query:

```
call WAREHOUSE.REGIONAL_RETAIL_SALES(
['2024-08-01','2024-08-31'],
'week',
'both',
'storefront and delivery',
'city',
[{'STATE':['Illinois','Ohio']}],
['BRAND'],
null,
[{'PARENT_COMPANY':['Cresco Cannabis']},{'LEVEL_02':['Vape']}]
)
```

Example 2: Measure the velocity of each Pack Size within a brand at each $5 price increment.

Query:

```
call WAREHOUSE.REGIONAL_RETAIL_SALES(
['2024-08-01','2024-08-31'],
'month',
'both',
'storefront and delivery',
'state',
[{'STATE':['California']}],
['BRAND','PACK_SIZE'],
[{'PURCHASE_PRICE':5}],
[{'BRAND':['Jeeter']},{'LEVEL_03':['Infused Pre-Rolled','Pre-Rolled']}]
)
```

REGIONAL_DISCOUNT_LIFT

Overview

The REGIONAL_DISCOUNT_LIFT procedure enables you to monitor discount trends and effectiveness at any granularity from market level to product level. This allows you to optimize your own discounting without losing sight of your competition.

Calling the stored procedure

```
call WAREHOUSE.REGIONAL_DISCOUNT_LIFT(
    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")
    INCLUDE_DELIVERY VARCHAR, --Required. Options: ("storefront and delivery", "storefront only","delivery only")
    REGIONAL_GRANULARITY VARCHAR, --Required. options: ("country","state", "county", "city")
    REGIONS ARRAY, --Required. array of regions*
    GROUPING_ATTRIBUTES ARRAY, --Nullable. array of product attributes, including any categorical attributes**
    BUCKETING_ATTRIBUTE ARRAY, --Nullable. Format: [{'[bucketing attribute]':[bucket size]}]. All numerical metrics*** are valid bucketing attributes
    FILTERS VARIANT --Nullable. All desired filters formatted as [{'[Categorical Attribute** 1]':['value 1','value 2'...]},...,{'[Numerical Measure*** 1]':[[min value], [max value]]},...].
)
```

*see Get Available Regions
**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
[grouping attributes]		These columns will match the columns specified in the GROUPING_ATTRIBUTES parameter
[regional attributes]		These columns will contain geographic information according to the REGIONAL_GRANULARITY parameter
[bucketing attribute]		This column will match the column specified in the BUCKETING_ATTRIBUTES parameter
DISCOUNT_LEVEL	FLOAT	Bucketed to the nearest 5%, the effective discount level, calculated using ORIGINAL_PRICE and DISCOUNT_PRICE
SALES_LIFT	FLOAT	Sales Dollar Lift as a decimal (SALES_LIFT of 1

		means 100%)
UNITS_LIFT	FLOAT	Units Lift as a decimal (UNITS_LIFT of 1 means 100%)
FREQUENCY	NUMBER(36,6)	Frequency of discount level as a decimal (FREQUENCY of 1 means 100%)

Examples:

Example 1: Measure the sales and units lift of each discount level within a brand

Query:

```
call REGIONAL_DISCOUNT_LIFT(
['2024-08-01','2024-08-31'],
'week',
'both',
'storefront and delivery',
'state',
[{'STATE':['California']}],
['BRAND'],
null,
[{'BRAND':['Wyld']},{'LEVEL_02':['Edibles']}]
)
```

Appendix

Categorical Attributes

Attribute Name	Data Type
PARENT_COMPANY	VARCHAR(255)
BRAND	VARCHAR(255)
SHORT_ITEM	VARCHAR(513)
PRODUCT_DESCRIPTION_DETAILED	VARCHAR(16777216)
STRAIN	VARCHAR(255)
SERIES	VARCHAR(804)
ITEMS_PER_PACK	NUMBER(38,0)
TOTAL_ITEM_WEIGHT	VARCHAR(30)
FLAVOR	VARCHAR(255)
FLAVOR_TYPE	VARCHAR(16777216)
UNIT_OF_MEASURE	VARCHAR(255)

PACK_WEIGHT	VARCHAR(16777216)
GENERIC_VENDOR	VARCHAR(19)
GENERIC_ITEMS	VARCHAR(17)
STRAIN_SPECIFIC	VARCHAR(3)
CONTAINS_CBD	VARCHAR(255)
TOTAL_THC	VARCHAR(255)
TOTAL_CBD	VARCHAR(255)
LEVEL_01	VARCHAR(255)
LEVEL_02	VARCHAR(255)
LEVEL_03	VARCHAR(255)
LEVEL_04	VARCHAR(255)
LEVEL_05	VARCHAR(255)
THC_PER_DOSE	NUMBER(38,6)
CBD_PER_DOSE	NUMBER(38,6)
COMBINED_THC_AND_CBD_PER_DOSE	NUMBER(38,11)
SAMPLES_INCLUDED	VARCHAR(16)
PAX_FILTER	VARCHAR(7)
THC_RANGE	VARCHAR(255)
CBD_RANGE	VARCHAR(255)
CELEBRITY_ENDORSED	VARCHAR(22)
MOOD_EFFECT	VARCHAR(255)
IS_FLAVORED	VARCHAR(12)
CONTAINS_CBG	VARCHAR(255)
CONTAINS_CBN	VARCHAR(255)
IS_LIVE_EXTRACT	VARCHAR(16777216)
PACK_SIZE	VARCHAR(16777216)

Numerical Measures

Attribute Name	Data Type
DISCOUNT_PRICE	FLOAT
ORIGINAL_PRICE	FLOAT
PURCHASE_PRICE	FLOAT

COST_PER_UNIT	FLOAT
DOLLARS	FLOAT
UNITS	FLOAT
EQ_UNITS	FLOAT

Get Available Regions

The following examples will show you how to use WAREHOUSE.VW_CITIES to build your REGIONS array on the state, county and city levels. The output can be directly copied into your "call WAREHOUSE.REGIONAL_DISCOUNT_LIFT(...)" or "call WAREHOUSE.REGIONAL_RETAIL_SALES(...)" statement as the REGIONS parameter.

State Level

example query:

```
select '['''||listagg(distinct state,''', ''')||''']' from warehouse.vw_cities
```

example output:

```
['Colorado', 'New York', 'Nevada', 'Ohio', 'Oregon', 'Massachusetts', 'Arizona',
'Missouri', 'California', 'New Jersey', 'Pennsylvania', 'Maryland', 'Illinois',
'Florida', 'Michigan']
```

County Level

example query:

```
select '['''||listagg(distinct county||', '||state,''', ''')||''']' from
warehouse.vw_cities
where state = 'Massachusetts'
```

example output:

```
['Hampden County, Massachusetts', 'Middlesex County, Massachusetts', 'Essex County,
Massachusetts', 'Worcester County, Massachusetts', 'Barnstable County, Massachusetts',
'Suffolk County, Massachusetts', 'Franklin County, Massachusetts', 'Norfolk County,
Massachusetts', 'Nantucket County, Massachusetts', 'Plymouth County, Massachusetts',
'Dukes County, Massachusetts', 'Hampshire County, Massachusetts', 'Bristol County,
Massachusetts', 'Berkshire County, Massachusetts']
```

City Level

example query:

```
select '['''||listagg(distinct city||', '||state,''', ''')||''']' from
warehouse.vw_cities
where state = 'Massachusetts'
and county = 'Suffolk County'
```

example output:

```
['Revere, Massachusetts', 'Chelsea, Massachusetts', 'Boston, Massachusetts']
```