

Project: Analyzing a Market Test

Step 1: Plan Your Analysis

1. What is the performance metric you'll use to evaluate the results of your test?

Gross Profit Margin would be the performance metric used.

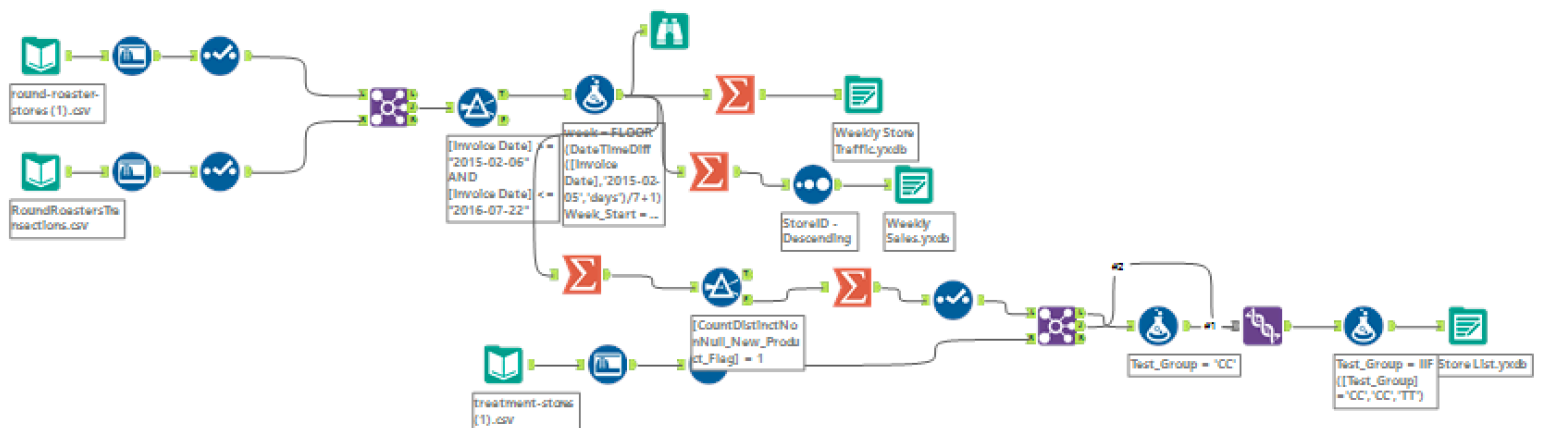
2. What is the test period?

Test period would be 12 weeks from 29/April/2016 until 21/July/2016.

3. At what level (day, week, month, etc.) should the data be aggregated?

Data should be aggregated on weekly basis.

Step 2: Clean Up Your Data



Step 3: Match Treatment and Control Units

1. What control variables should be considered?

- A. Square Feet.
- B. Average Monthly Sales.

These two variables look promising from the applied analysis.

2. What is the correlation between each potential control variable and your performance metric?

	Gross.Margin	Sq_Ft	AvgMonthSales
Gross.Margin	1.0000000	-0.0069129	0.0083061
Sq_Ft	-0.0069129	1.0000000	-0.0989901
AvgMonthSales	0.0083061	-0.0989901	1.0000000

According on the above table, AvgMonthSales is highly correlated with Gross Margin and therefore it should be used. Sq_Ft is negatively correlated and shouldn't be used.

3. What control variables will you use to match treatment and control stores?

- A. Trend.
- B. Seasonality.
- C. Average Month Sales.

4. Please fill out the table below with your treatment and control stores pairs:

Treatment Store	Control Store 1	Control Store 2
1664	8112	7162
1675	1580	1807
1696	1964	8212
1700	2014	1630
1712	8162	7434
2288	9081	2568
2293	9524	12219
2301	3102	2572
2322	2409	3235
2341	12536	2383

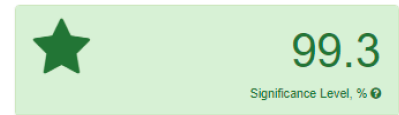
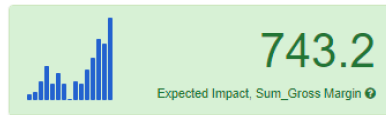
Step 4: Analysis and Writeup

1. What is your recommendation, Should the company roll out the updated menu to all stores?

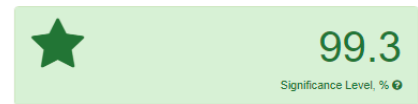
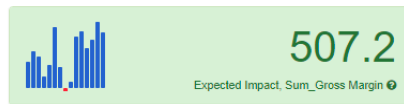
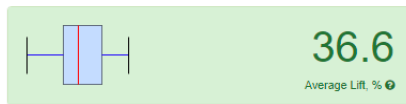
The company **should** roll out the updated menu based on our analysis.

2. What is the lift from the new menu for West and Central regions (include statistical significance)?

- Central Region:



- West Region:



3. What is the lift from the new menu overall?

