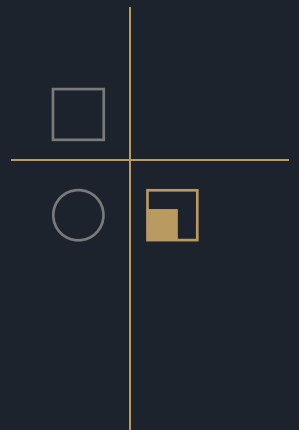


# MARKETING EFFECTIVENESS ANALYSIS



# THE CLIENT PROBLEM

Our client, a **leading beverage manufacturer** was **experiencing a decline in incidence** over the last five years. They had launched several initiatives across specific stores, **to reverse this decline**. Our client wanted **to evaluate the impact** of these initiatives on their total beverage incidence, revenue and profits. AQ was asked to **conduct a test and control study** to understand the impact of these initiatives.

## THE AQ SOLUTION

We followed a three step process for the analysis.

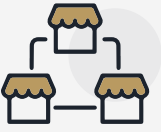
### STEP 1



#### DATA COLLECTION & PREPARATION

- We collected store data at a monthly level from the client
- We used a blend of product and store parameters as inputs to classify stores
- We checked the consistency of data across time periods and stores
- We treated the data for missing values and outliers
- We prepared the data in the format required for analysis

## STEP 2



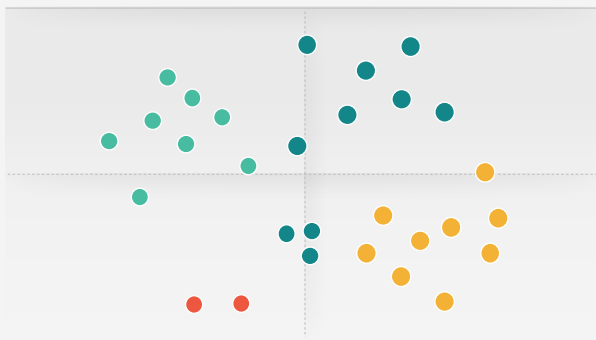
### SELECTION OF CONTROL STORES

**WE CLASSIFIED STORES INTO MEANINGFUL CLUSTERS AND FOUND CONTROL MATCHES FOR TEST STORES**

1

#### CLUSTERING

We grouped the stores based on their similarities



#### CLUSTER 1

Drinks sold (%) - Medium locational variables, beverage incidence

#### CLUSTER 2

Income sales (%) - Take-out

2

#### DISCRIMINANT ANALYSIS

We shortlisted variables relevant to each cluster to be used as controls

3

#### TEST CONTROL ALGORITHM

We explored different algorithms and identified the best one:

- Multiple tests to multiple controls (KNN)
- Multiple tests to one control (EUCLEDIAN)
- One test to multiple controls (EUCLEDIAN + N Sigma)

4

#### WE GAVE THE CLIENT A LIST OF TEST & CONTROL STORES

Recommended titles were also shared via personalized emails to subscribers who had been predicted to attrite so that they could be retained instead of lost.

Test store 1, Dumfries

Test store 2, Chantilly

Test store 3, Fairfax

Control store 1, Alexandria

Control store 3, Alexandria

Control store 6, Aventura

No match

## STEP 3



### SUCCESS EVALUATION

#### WE EVALUATED THE SUCCESS OF THE DRIVE BY:

##### THE TEST CONTROL ALGORITHM

- We measured the lift between test & control stores with the metrics of sales revenue, volume, beverage incidence and profitability.
- We also used ANOVA & ANCOVA to statistically check the significance of these results.

## THE CLIENT BENEFIT

One particular initiative, let's call it "Prototype 1" had a positive impact in mitigating the decline in beverage incidence (+5.9pp). The positive impact of "Prototype 1" was statistically significant at a confidence level of at least 95%.

The number of beverage units sold, experienced a positive lift (+4.7pp) in test stores as compared to control stores.

"Prototype 1" contributed to 24% of the total beverage units sold and 20% of the beverage \$ sales in test stores. In the test stores, consumption shifted from regular drinks to "Prototype 1".

The client now had a clear direction on which of the new initiatives they could implement on a larger scale.



**Thank You**

For any queries, get in touch with us.

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