

Does changing rotation rate of rotating product slots at Trader Joe's affect total rotational product sales?

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Strategic Priorities of Trader Joe's

- *Maximize profits while offering innovative and unique products available at affordable prices and fostering unique, employee-customer-centric environment*



A description of Trader Joe's rotation model

- Trader Joe's has two product types
 - Rotational
 - Non-rotational
- Rotational = "Limited time only"
 - Aligns with strategic priorities!



Could altering rate of rotation amongst rotational products affect total rotational product sales?





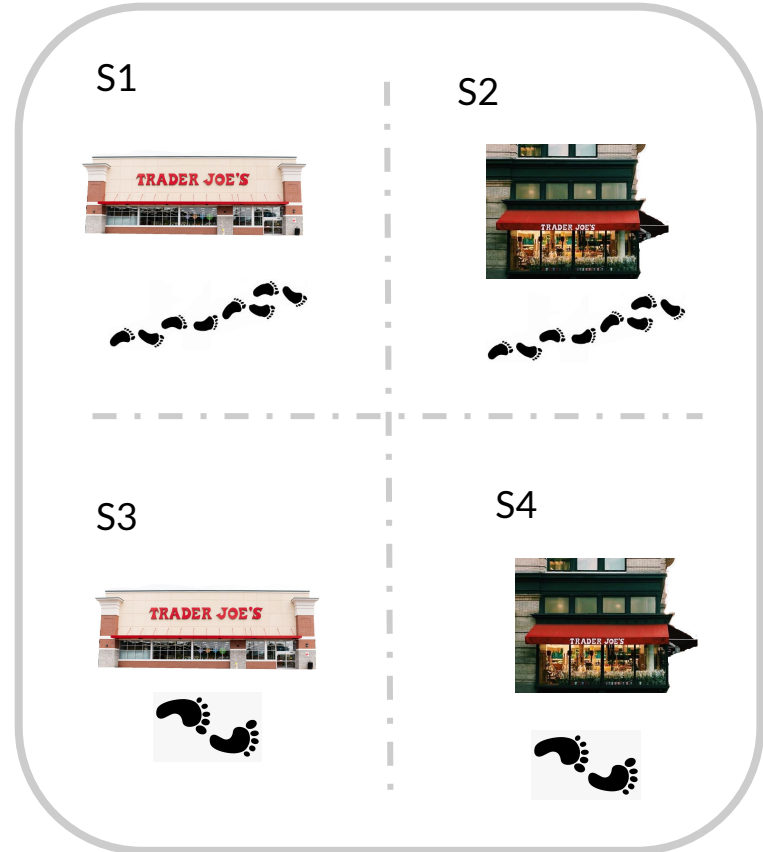
Experimental Design

Program evaluation experiment

Stores will be randomly selected into treatments via **stratified randomization**. The randomization will simply be communicated to store manager.

4 Stratas:

1. High Traffic Small Store
2. Low Traffic Small Store
3. High Traffic Big Store
4. Low Traffic Big Store





Treatment

Experiment length: 6 months

- Want time for customers to become “accustomed” to treatment

Random assignment to 3 Treatment Groups

- **Control:** Will remain with status quo rotational schedule (example: Monthly rotation)
- **T1:** Will be scheduled at 1.5 rate of status quo
- **T2:** Will be scheduled at 0.5 rate of status quo

Control



T1



T2





Sample Size

Best case: 505 Trader Joe's stores in U.S. - use as many as possible

Minimum needed: 390 (132 stores per treatment)

- Did research on average sales for different locations of Trader Joe's stores and the percentage of those products that are rotational to come up with sample size figure
- Confidence level **90%**, statistical power **70%**

Treatment Effect

We'd like to proceed with a treatment effect of around 4%

- based on our research into store sales and ratio of rotational products, we think this will amount to an average of around **\$200,000** over 6 mo.
- We think this would be an adequate effect to justify investment

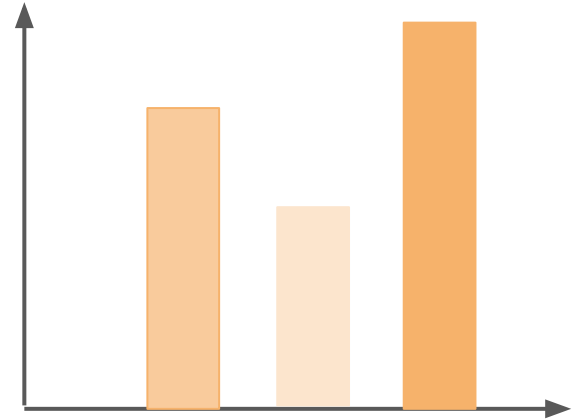


Outcome measurement

Our outcomes of interest:

- **Total sales of rotational products per store**
- Why aggregate by store?
 - Trader Joe's wants to emphasize the *entire store* as the brand

Can easily be tracked through accounting documentation





Our Hypothesis:

Trader Joe's stores with higher rotation rate will have higher rotational product sales due to increased 'novelty' demand of rotational products.



Potential Limitations and Caveats

- Ratio of non-rotational to rotational products should be kept consistent as possible
- Low projected statistical power, due to relatively limited store.





How Would This Be Implemented?

- Operations workflow already in place within stores

Possible Negative Implications to Consider:

- Will this affect storage space in the facilities?





Thank you.

