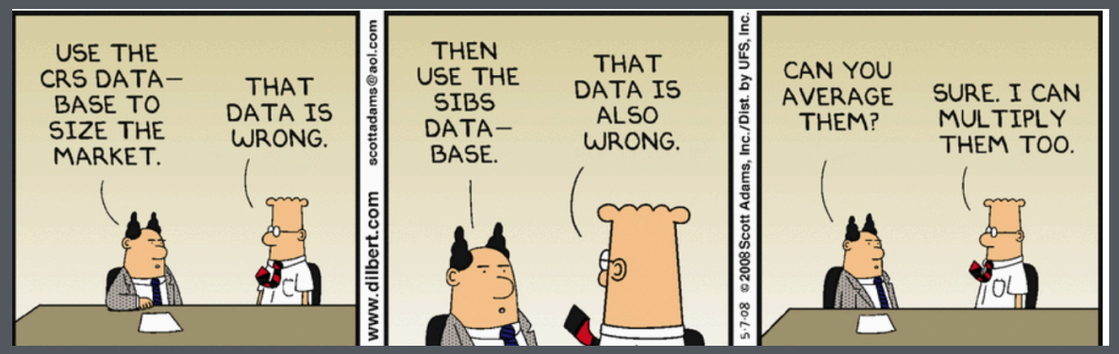
Data Analysis Customers' Orders & Discounts

The Data



- SQL data about
  - Employees
  - Customers
  - Products
  - Territories
  - Orders
  - Suppliers
- Good data for our analysis
- Reliable results & recommendations

Strategy

Statistical Hypothesis Tests

- Asking data questions regarding discounting structure results
- Making sure the data responses are
    1. Statistically significant or very reliable
    2. Accurate answers

Hypothesis Testing Questions

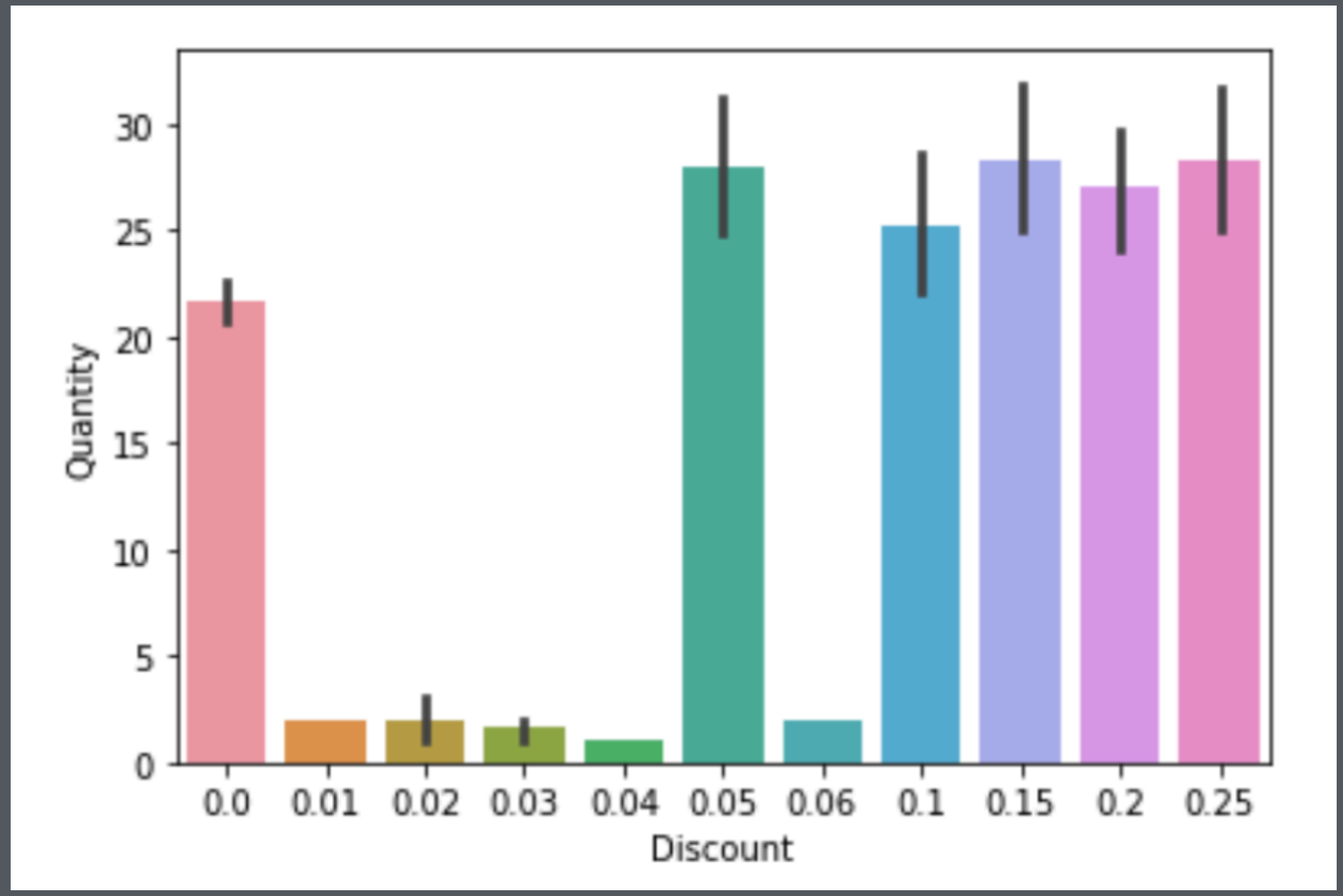
Q2 (a): Do discounts effect quantity products ordered?

Yes! Discounts have a statistically significant effect of the quantity of products ordered.

Hypothesis Testing Questions

Q1 (b): What's the best level of discount?

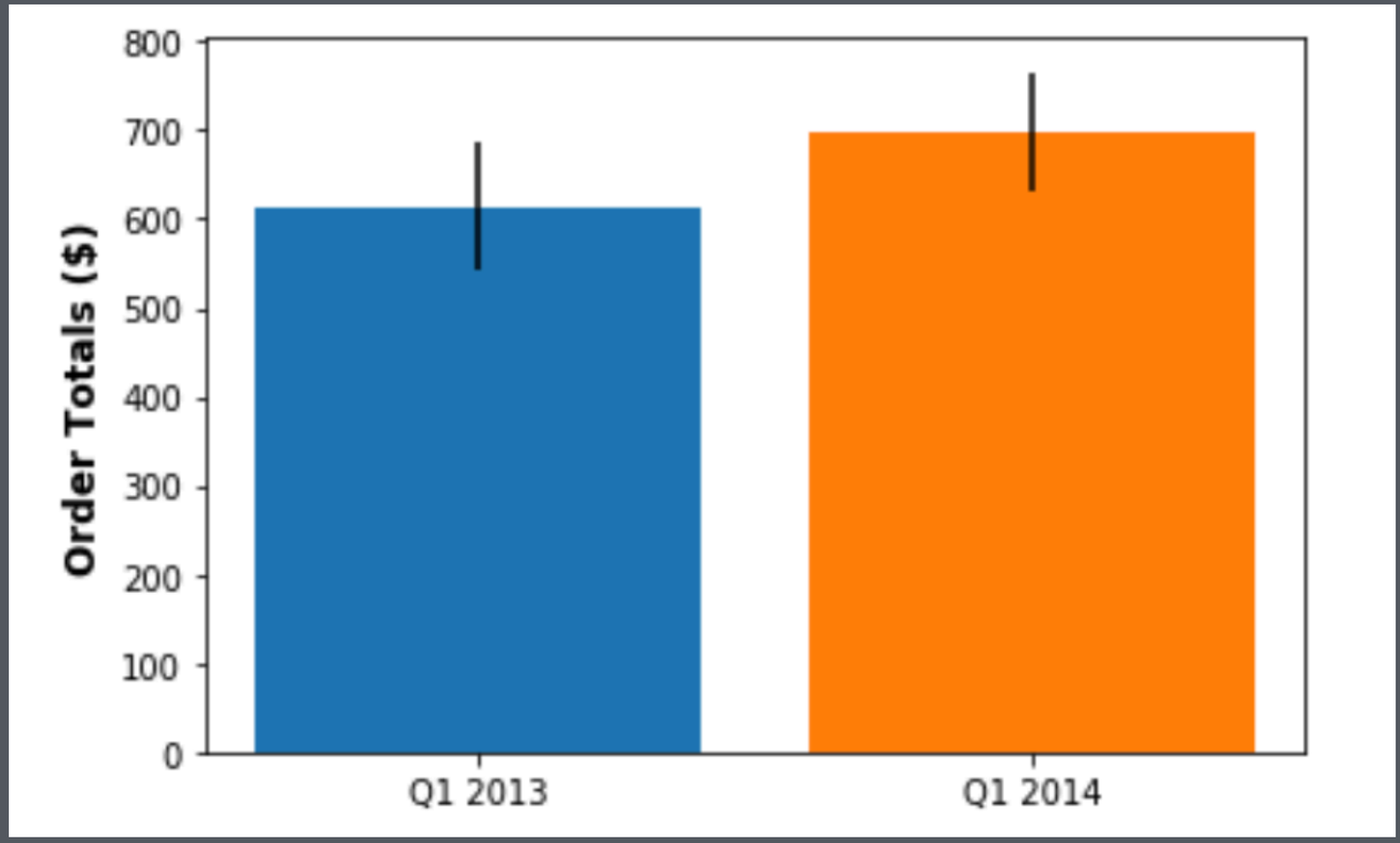
- Best discount: 5%
- Do not exceed: 15%



Hypothesis Testing Questions

Q2: Did YOY Q1 orders increase?

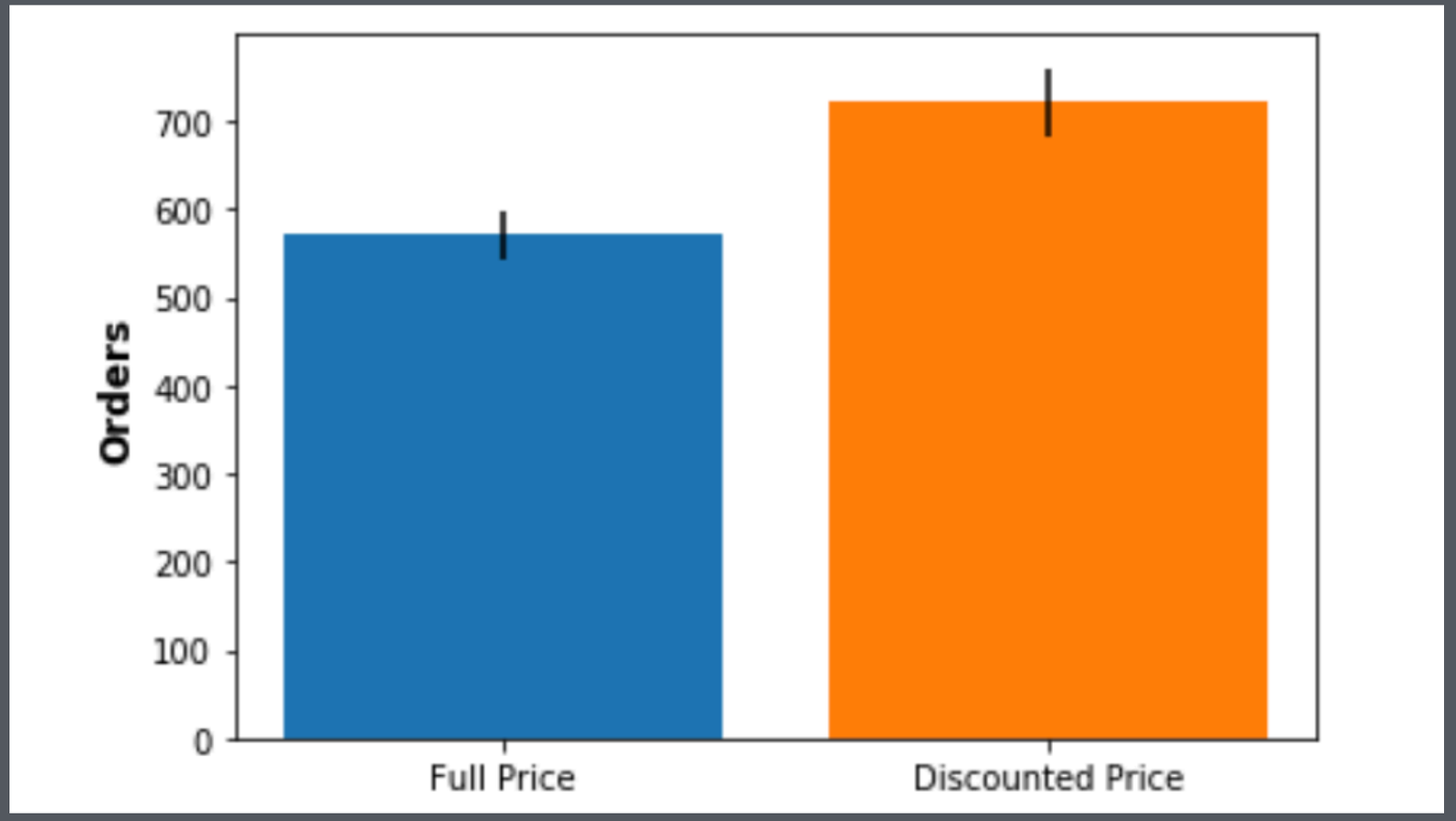
Yes! Great work



Hypothesis Testing Questions

Q3: Are order totals greater with discounts?

Yes! Have larger orders with discounts.

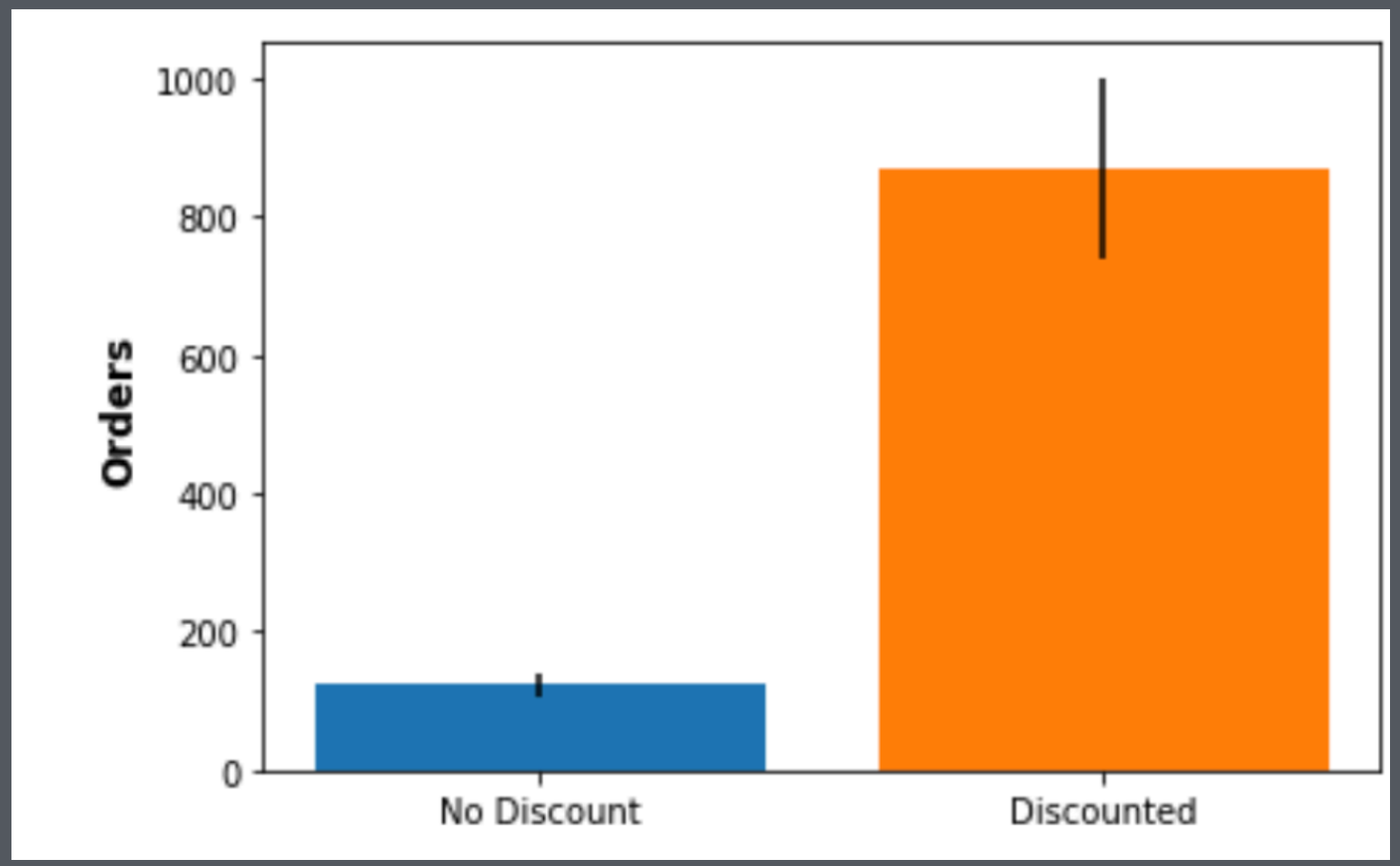


Hypothesis Testing Questions

Q4: Customers without discounts buy less?

(asking if you clients are price sensitive or not)

Yes! Customers buy more with discounts. A lot more



Recommendations

- *“Trained Customers”*
    - Is it price capitulation or discounts to drive customer decisions?
    - 5% discount is most effective. No need to exceed 15%.
- Discounts drive product volume and order size.
- Discounts are working well.

Continue plan & deploy strategies

- If sales exceeding YOY goals, then “stay the course”

Future Work

- “Dig” into multiple data sets
- Software or data dev work that can predict customers behaviors
- Data analysis to predict data trends for larger customer orders

Thanks!

Hypothesis Testing Questions & Recommendations

Q2: Do discounts have effect on the quantity of a products orders?

Yes! Discounts have a statistically significant effect of the quantity of products ordered.

Recommendation: Continue to offer discounts to increase order sizes BUT limit discounts to no more than 15%.

Hypothesis Testing Questions & Recommendations

Q4: Are order values greater with discounts?

Yes!

Recommendation: