My Findings

By Eric Sundstrom
Data Scientist, Northwind Traders

• I have completed 4 statistical analyses

 Each test is based on a question meant to explore ways to help the company

1st Question

Are The Younger Sales Employees Selling More Than The Older Sales Employees?

Test Parameters:

lower 50% in age of employee vs. upper 50%

 total orders sold by employee over a 2-year period (2013, 2014)

1st Test Results

 NO notable difference in sales performance

Takeaways

- revisit test in future as company expands
- tells us who to train or whether to switch to hiring younger candidates

unreliable results

 all the data taken from the company's SQLite Database

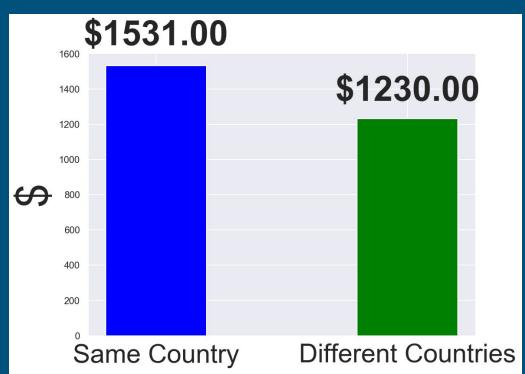
2nd Question

Is The Average Order Price
Higher When The Sales
Employee Is Located In The
Same Country As The Buyer?



2nd Test

average order price IS higher Results when both parties are in the same country



Takeaway

should we add an office to a country we are not currently in?

3rd Question

Have More Discounted Products or Regularly Priced Products Been Sold Since Our Company Was Created?



3rd Test Results

- MORE products have been sold at regular price
- Results are not useful
- Don't reflect purpose of discounts

Takeaways

next test will improve upon this one

4th Question

Do Discounts Have An Effect On The Number Of Products Customers Order? If So, At What Level(s) Of Discount? used average order size to measure the effectiveness of a discount



4th Test Results

average order size IS much higher when the product is on sale



Takeaways

 we should not hesitate to use discounts to see increase in sales

4th Test Results (Continued.)

- each discount rate showed higher # of products in orders on average
- 20% and 25% showed by far the biggest increase in sales
- 20% most effective discount



Future Work



study profit margin of discounts

effectiveness decreases over time?

