

Northwind Traders

Declining Profitability

Agenda

- Background
- Objective
- Methodology
- Areas of Exploration
 - Discounts
 - Customer Loyalty
 - Employee Performance
- Action Plan
- Future Work

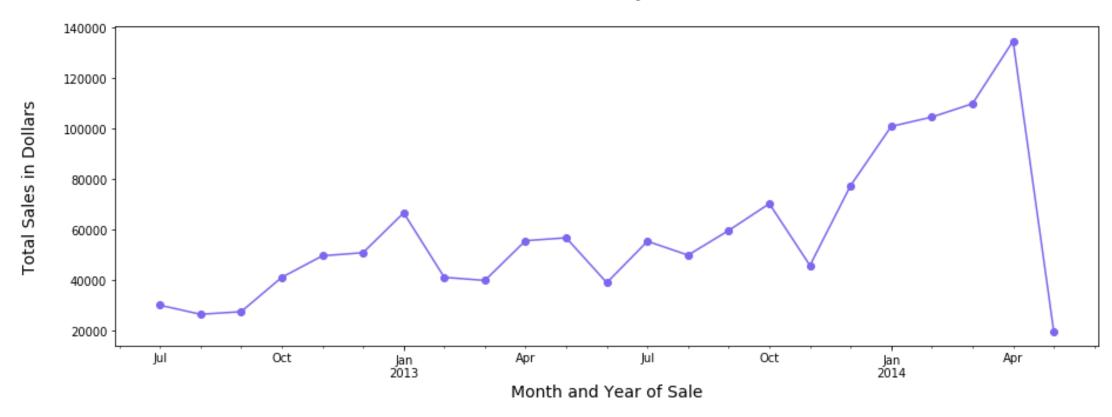


Northwind Traders

Successful Global Importer/Exporter of Specialty Foods

Sales growing year-over-year, profits are declining

Total Monthly Sales

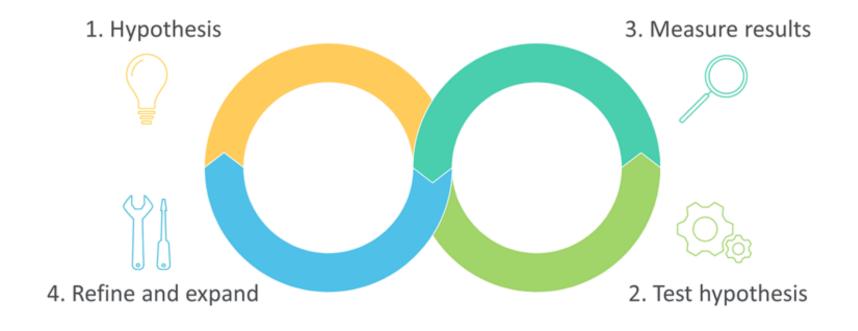


Objective

Create action plan to increase Northwind Traders' profitability.



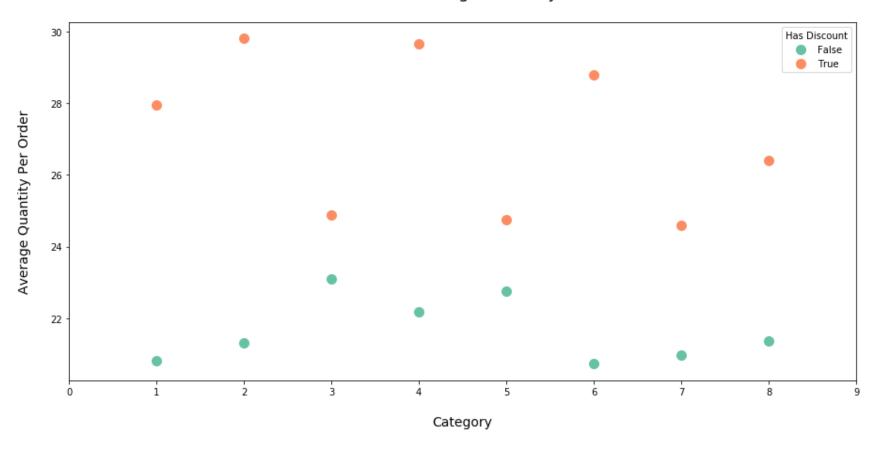
Methodology



All findings based on the scientific method for research design and hypothesis testing.

Discounts and Order Quantity

Discount and Average Quantity Ordered



Do discounts have an effect on average quantity per order?

Mean quantity of 27 products per order when a discount is offered.

Orders with no discount average 22 items per order.

Discount and Average Order Total

How do discounts effect average order total?

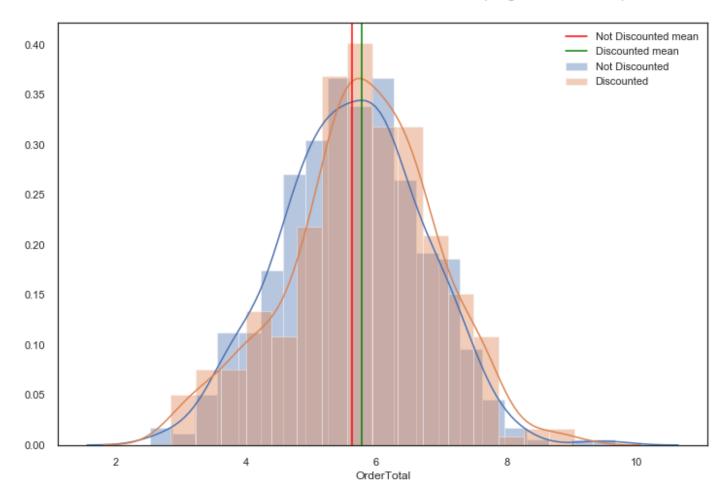
Average order total **not** increased by discounts.

Discounts erode profit margins.

Recommendation:

Limit how employees use discounts.

Discounted vs Not Discounted Order Totals (Log Transformed)



Number Of Orders Per Level of Discount

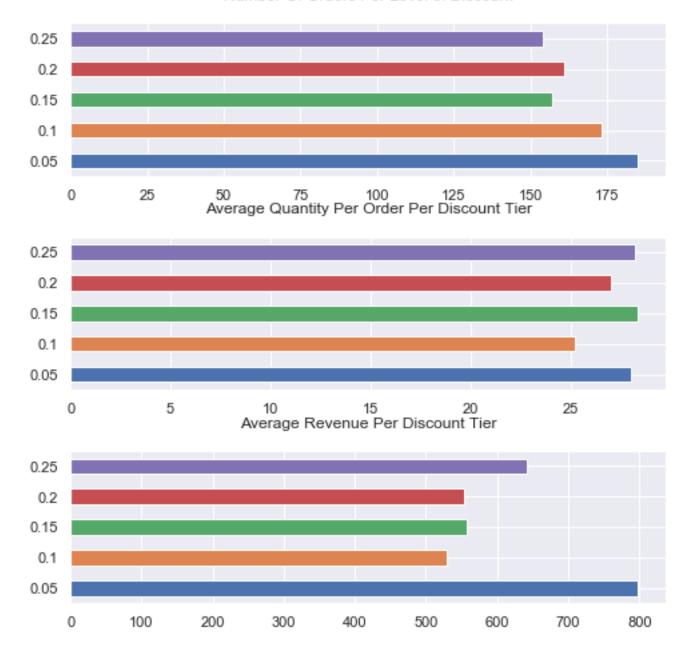
The Effects of Level of Discount

How does level of discount impact average quantity per order and order total?

Average quantity per order **not** increased by level of discount.

Recommendation:

Keep discount at 5% as it is most profitable, averaging \$740 revenue per order and highest average number of orders.



Customer Loyalty and Total Spend



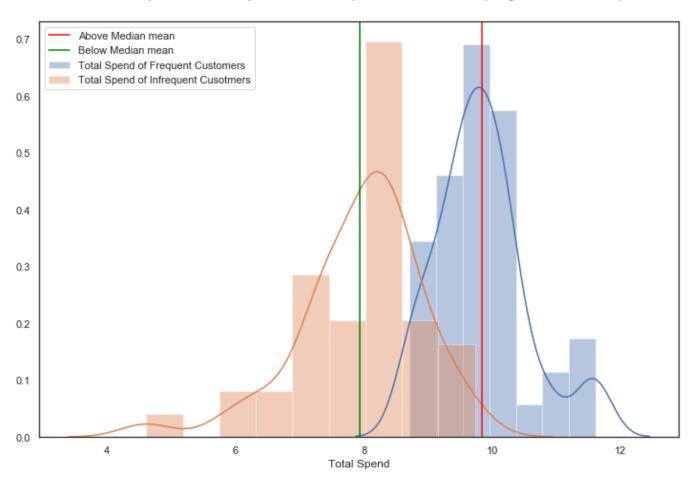
Customers who buy more often spend \$25,107 on average.

Customers who buy less often spend \$4034 on average.

Recommendation:

Encourage Frequent Customers to Buy More Often

Total Spend for Frequent vs Infrequent Customers (Log Transformed)



Employee Performance

Do employees with the highest sales have the highest revenue per order?

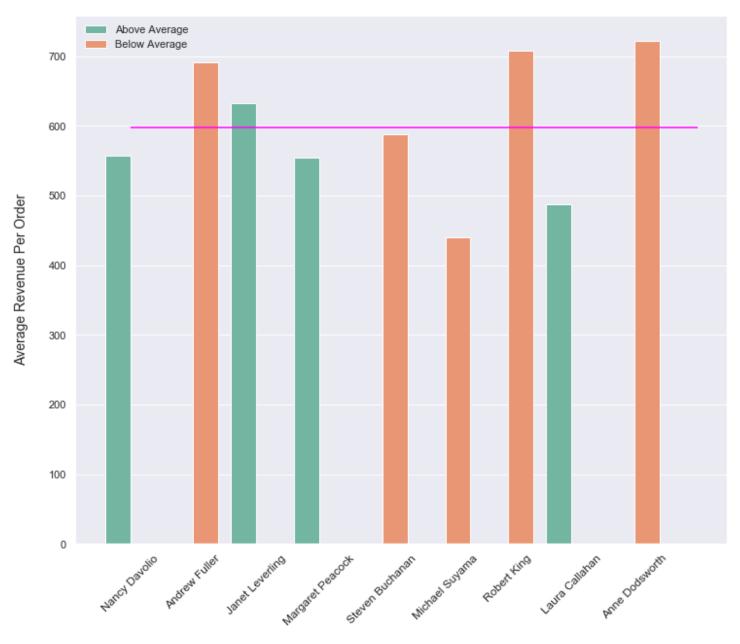
Employees with highest number of sales have an average \$558 revenue per order.

Employees with lower than average number of sales have an average \$630 revenue per order.

Recommendation:

Provide Employees with Comprehensive Sales Training.

Share best sales practices with underperforming employees.



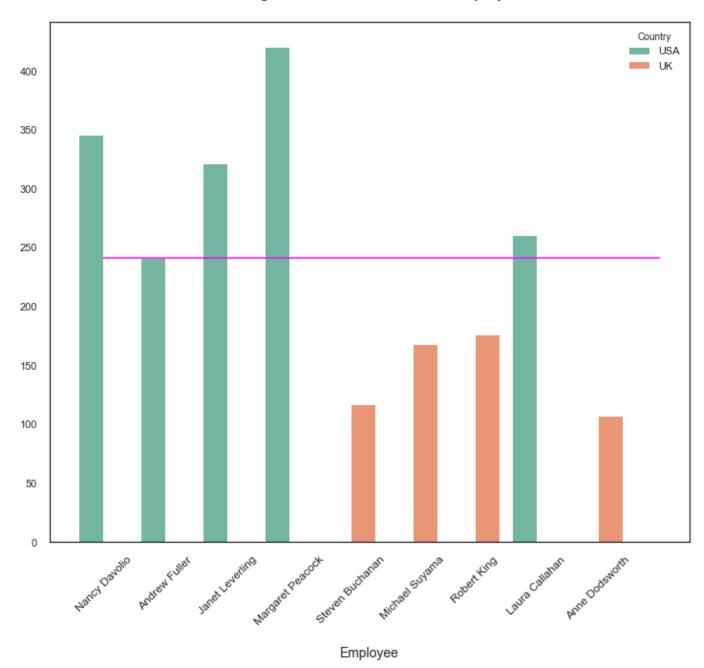
Bonus: Location-Based Employee Performance

All four UK-Based Employees have below average number of sales.

Recommendation:

Retrain UK-Based Sales Employees.

Share best sales practices from US team with UK office.



Action Plan

- 1. Limit how sales team can issue discounts.
- 2. When issued, keep discount to 5%.
- 3. Create strategy to encourage frequent customers to buy more often.
- 4. Retrain sales staff, especially employees in UK office.
- 5. Encourage high performing colleagues to share best sales practices high underperforming employees.

Future Work

- Explore ways to increase orders from frequent buyers, like coupons, referral codes and exclusive shopping events.
- Investigate why all the UK sales team has below average number of sales.
- Cost-Benefit Analysis



