

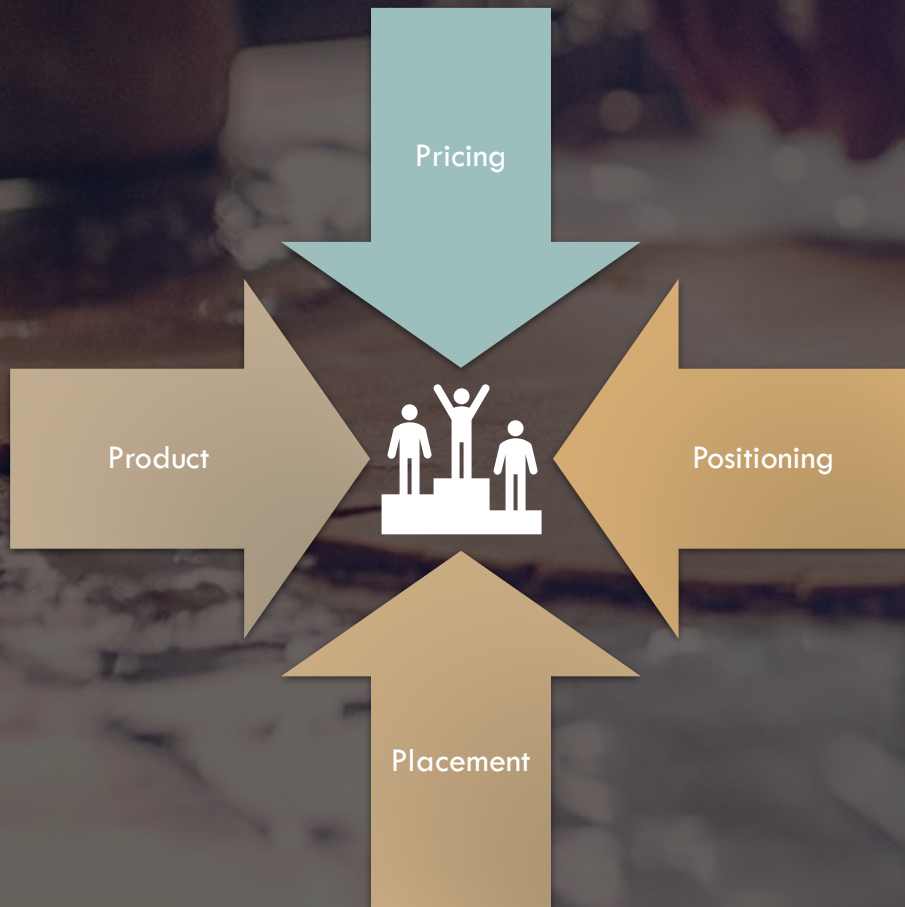
The background of the entire slide is a close-up, high-resolution photograph of dark brown, roasted coffee beans. The beans are scattered across the frame, with some in sharp focus in the foreground and others blurred in the background, creating a sense of depth. The lighting is soft, highlighting the texture and creases of the beans.

NORTHWINDS PRICING ANALYTICS

Strategies
And Tactics

R. Mih

OBJECTIVE: IMPROVED PRICING STRATEGY BASED ON STATISTICAL ANALYSIS

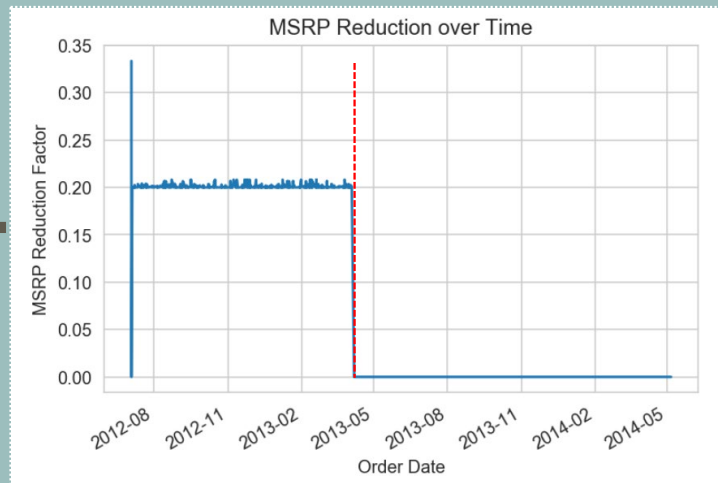


Two Types of Pricing Strategies covered:

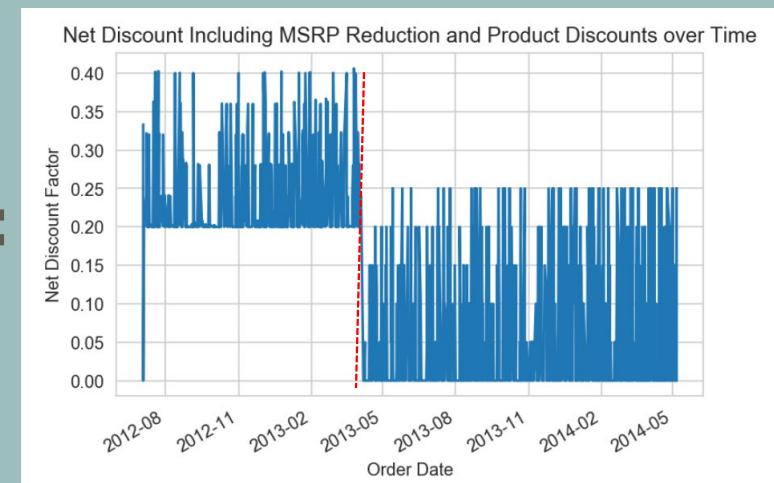
- Manufacturing Standard Retail Price (MSRP) Reduction
- Product Discounts



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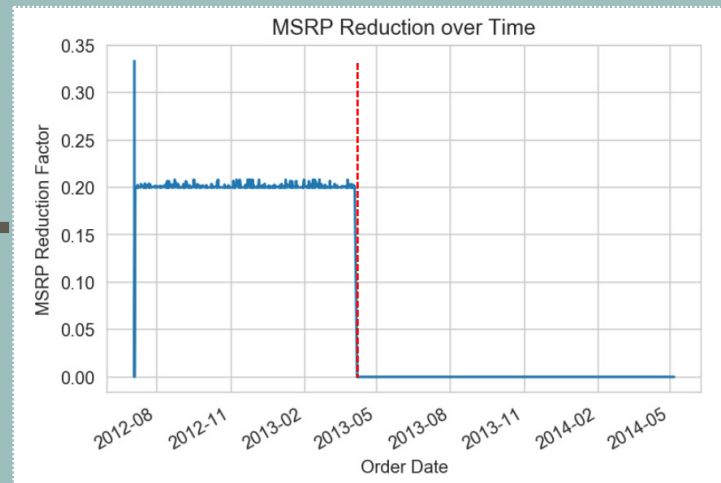


IN MAY 2013 WE CHANGED THE PRICING STRATEGY

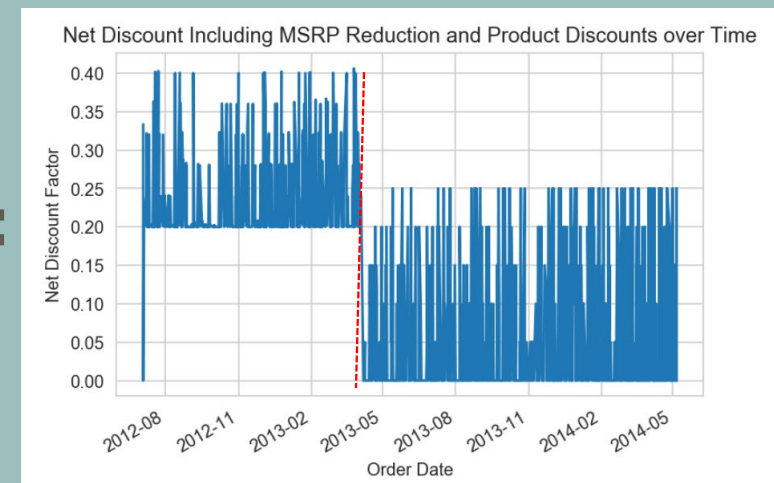
Elimination of MSRP Reduction
Continuation of Product Discounts



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1. No Product Discounts
2. With Product Discounts (up to 25%)

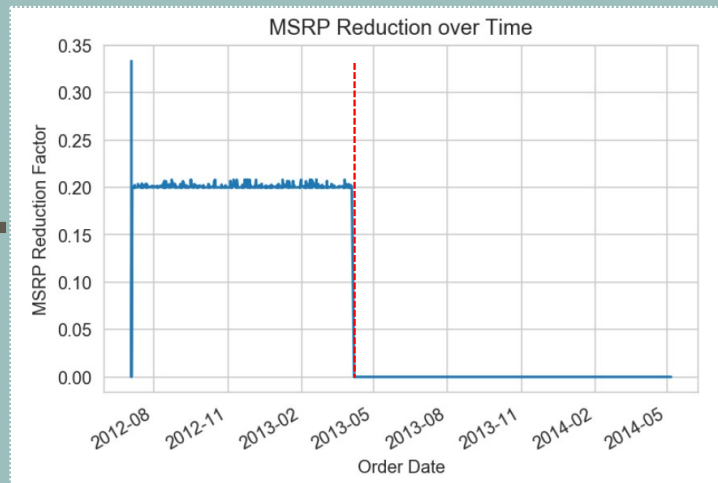
1. No MSRP Reduction
2. With MSRP Reduction ~20%

IN MAY 2013 WE CHANGED THE PRICING STRATEGY

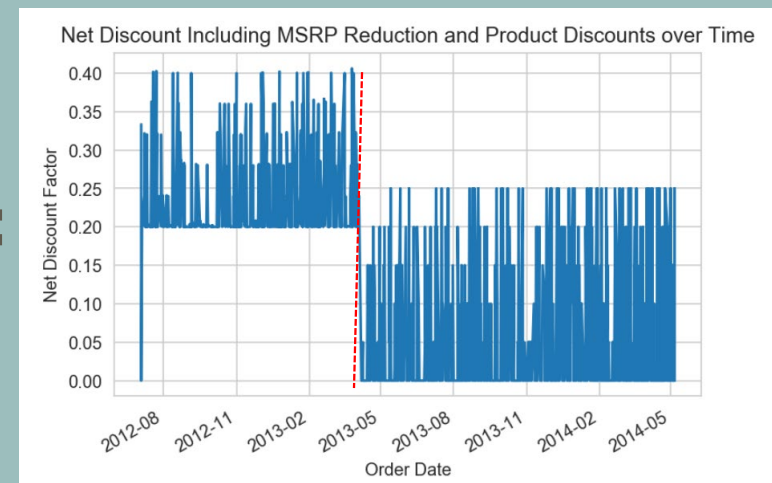
Elimination of MSRP Reduction
Continuation of Product Discounts



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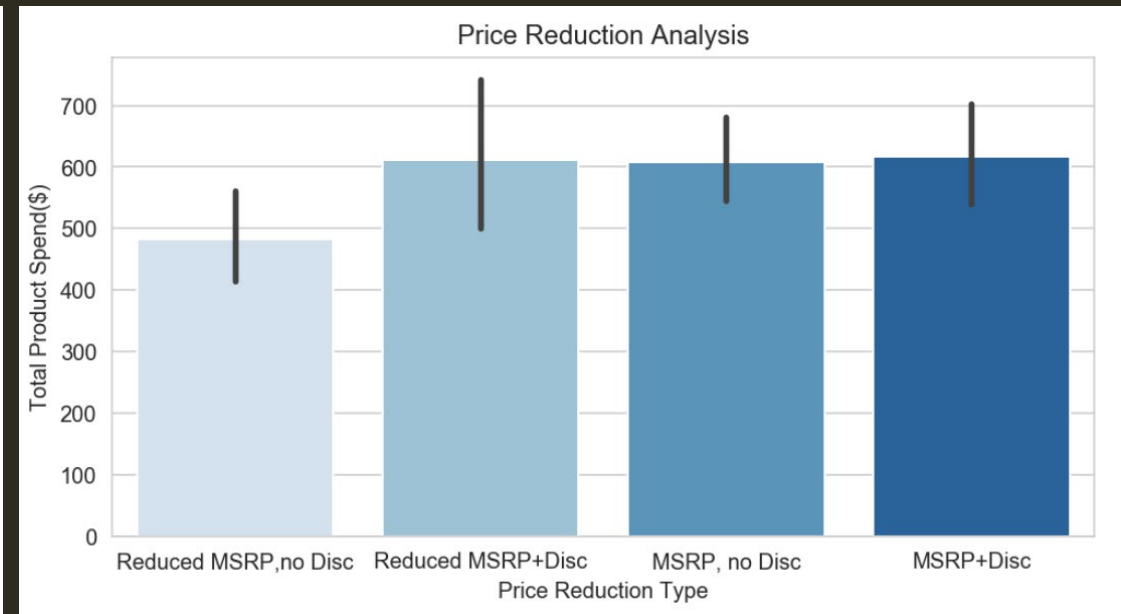
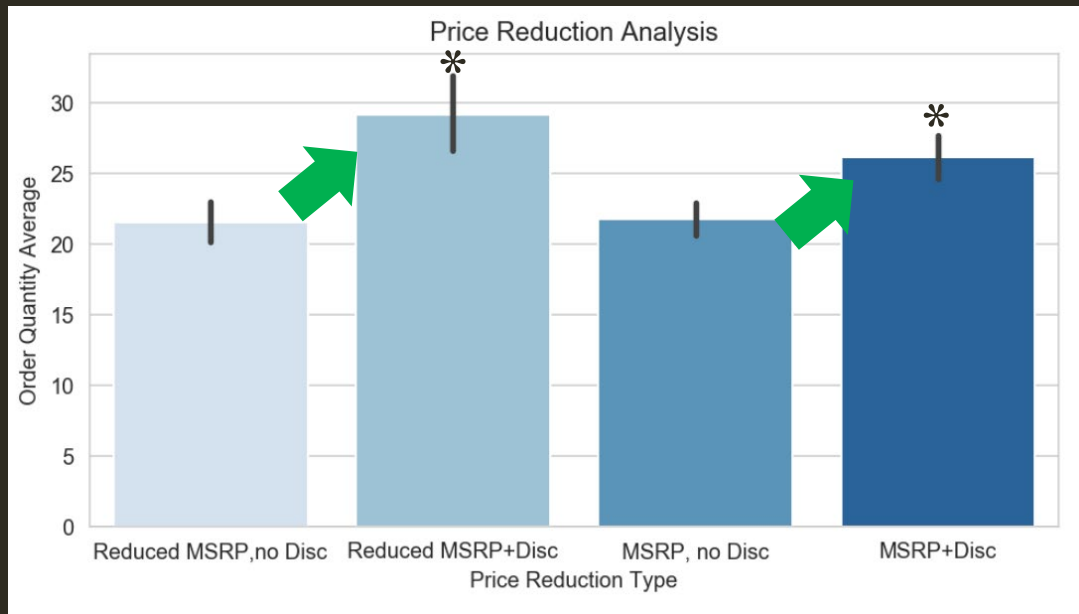
1. No Product Discounts
2. With Product Discounts (up to 25%)

1. No MSRP Reduction
2. With MSRP Reduction ~20%

1. MSRP Reduced, No Product Discounts
2. MSRP Reduced, With Product Discounts
3. MSRP, No Product Discounts
4. MSRP, With Product Discounts

IN MAY 2013 WE CHANGED THE PRICING STRATEGY

Elimination of MSRP Reduction
Continuation of Product Discounts

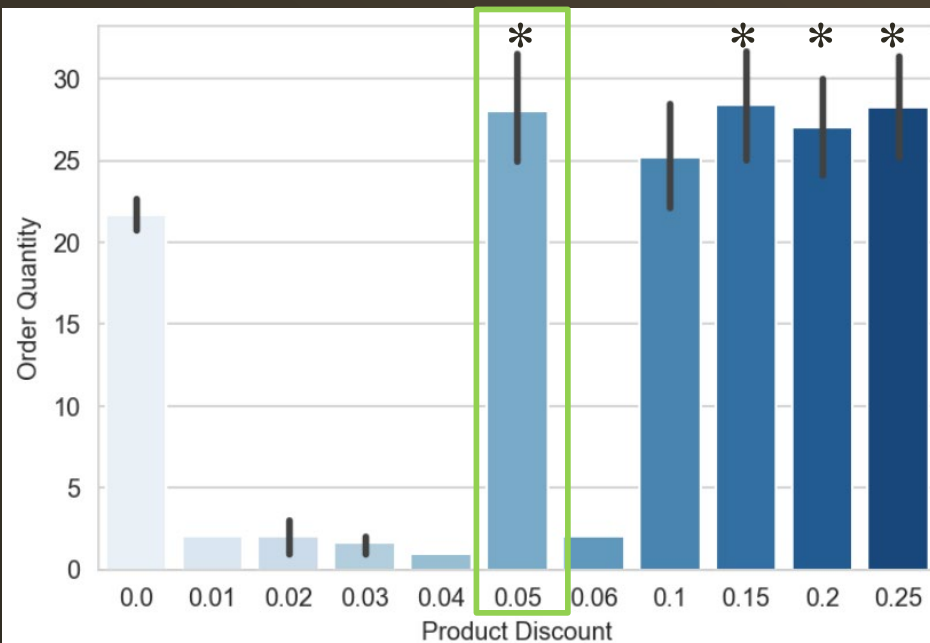


**PRODUCT DISCOUNT HAS THE GREATEST
IMPACT ON ORDER QUANTITY**

Product discount trends to
improve or maintain
Product Spend (\$)

* Indicates significant impact relative to no product discounts, p-value < 0.05

The average Order Quantity sold, without Discounts is 21.7
The average Order Quantity sold, with Discounts is 27.1

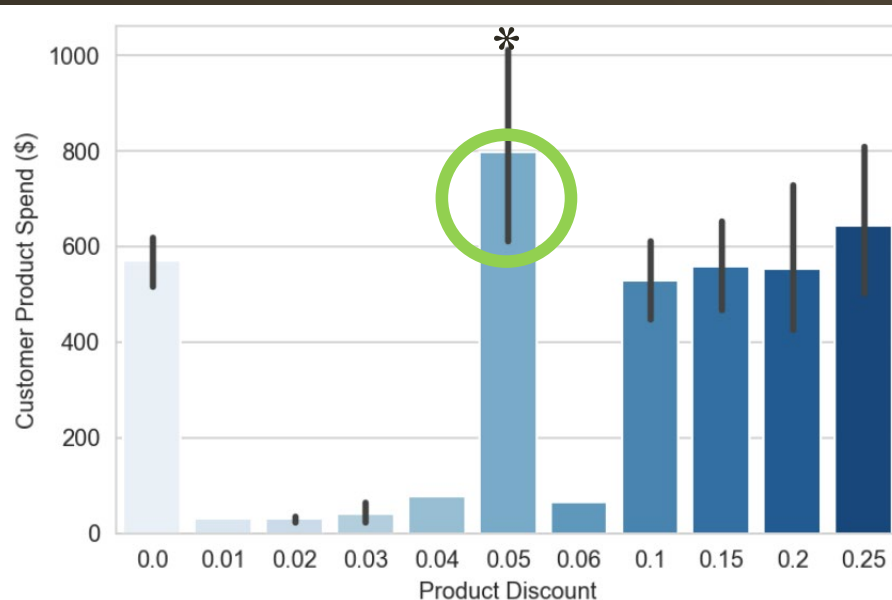


**PRODUCT DISCOUNTS
INCREASE THE AVERAGE
QUANTITY SOLD BY ~
29%**

**5% DISCOUNT IS JUST AS
EFFECTIVE AS 15-25%
DISCOUNTS TO INCREASE
QUANTITY**

* Indicates significant impact, relative to 0
Product discount, $p\text{-value} < 0.05$

The average Total Product Spend (\$) sold, without Discounts is 570.0
The average Total Product Spend (\$) sold, with Discounts is 614.7



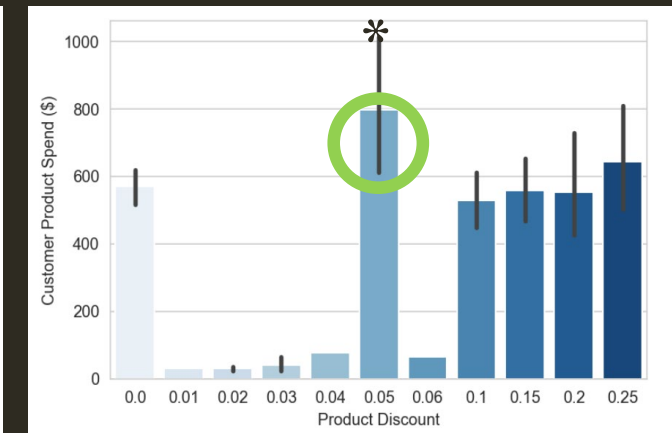
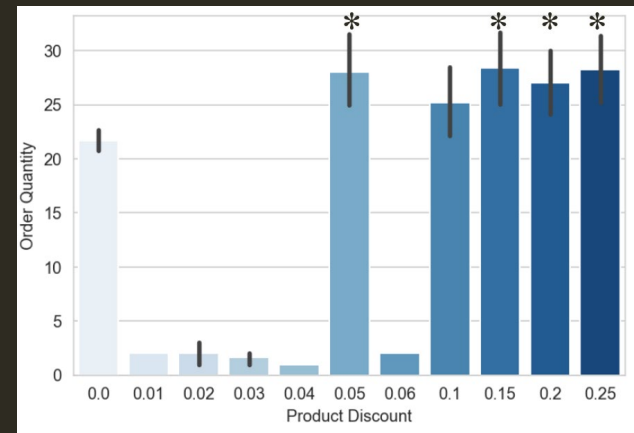
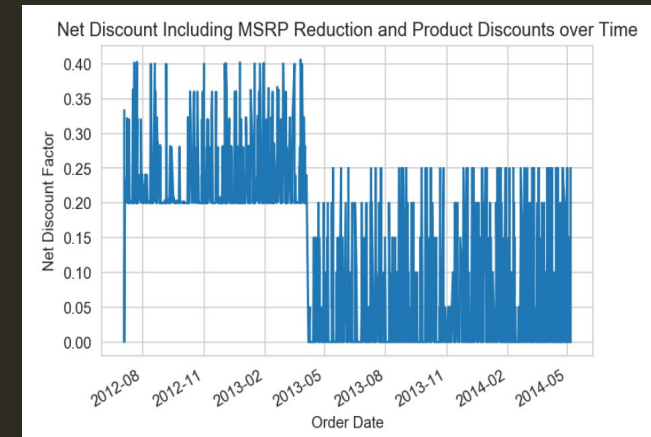
**THE PRODUCT
DISCOUNT INCREASES
PRODUCT SPEND ~8%**

**5% DISCOUNT HAS THE
MOST IMPACT ON
INCREASING PRODUCT
SPEND AVERAGE >17%**

* Indicates significant impact, relative to 0
Product discount, p-value < 0.05

CONCLUSION

- Increasing MSRP can be a delicate task, because done improperly, looks like gouging, resulting in loss of customer loyalty
- We have successfully transitioned to a pure product discount strategy
- Discounts of 5% are more effective than 15-25% discounts, increasing order quantity by +8% and product spend by >+17%



- Analysis of seasonality for discounts, orders, and product spend
- Impact of discounts on popularity of specific products (most popular, least popular) or specific product categories
- Impact of discounts on repeat orders (customer retention), and order size

NEXT STEPS

THANK YOU



Email

Rebecca.mih@gmail.com



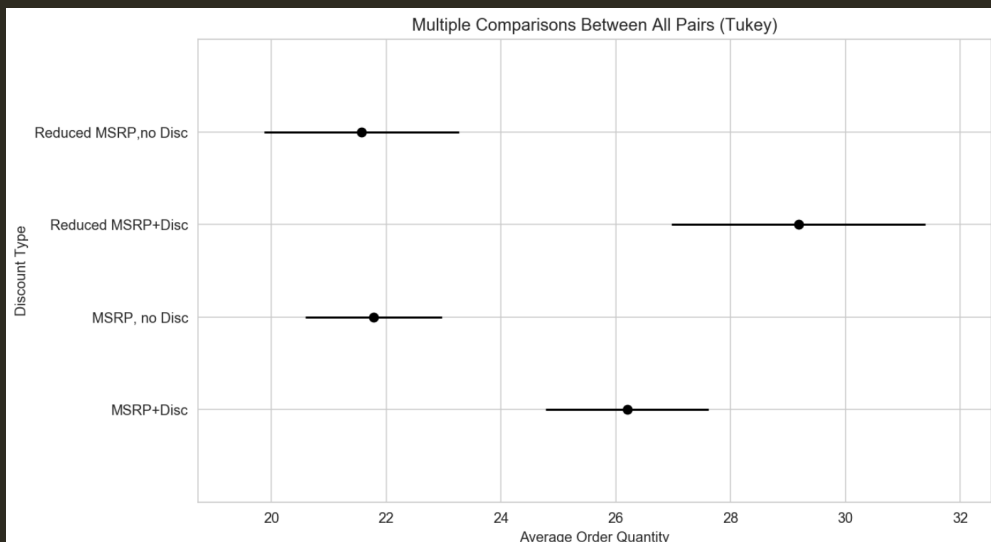
BACKUP SLIDES

AGGREGATION OF DATA SOLELY ON DISCOUNT AND NOT ON MSRP, IS ACCEPTABLE

Quantity Ordered

Multiple Comparison of Means - Tukey HSD, FWER=0.05

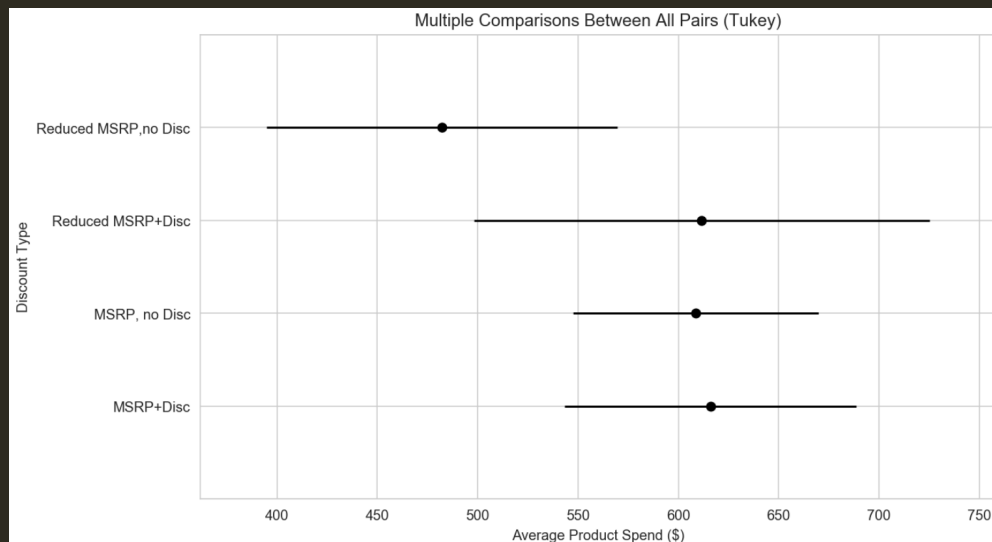
group1	group2	meandiff	p-adj	lower	upper	reject
MSRP+Disc	MSRP, no Disc	-4.4195	0.001	-6.9867	-1.8522	True
MSRP+Disc	Reduced MSRP+Disc	2.986	0.1489	-0.6453	6.6173	False
MSRP+Disc	Reduced MSRP,no Disc	-4.6255	0.001	-7.7656	-1.4853	True
MSRP, no Disc	Reduced MSRP+Disc	7.4055	0.001	3.9819	10.829	True
MSRP, no Disc	Reduced MSRP,no Disc	-0.206	0.9	-3.1033	2.6913	False
Reduced MSRP+Disc	Reduced MSRP,no Disc	-7.6115	0.001	-11.4832	-3.7397	True

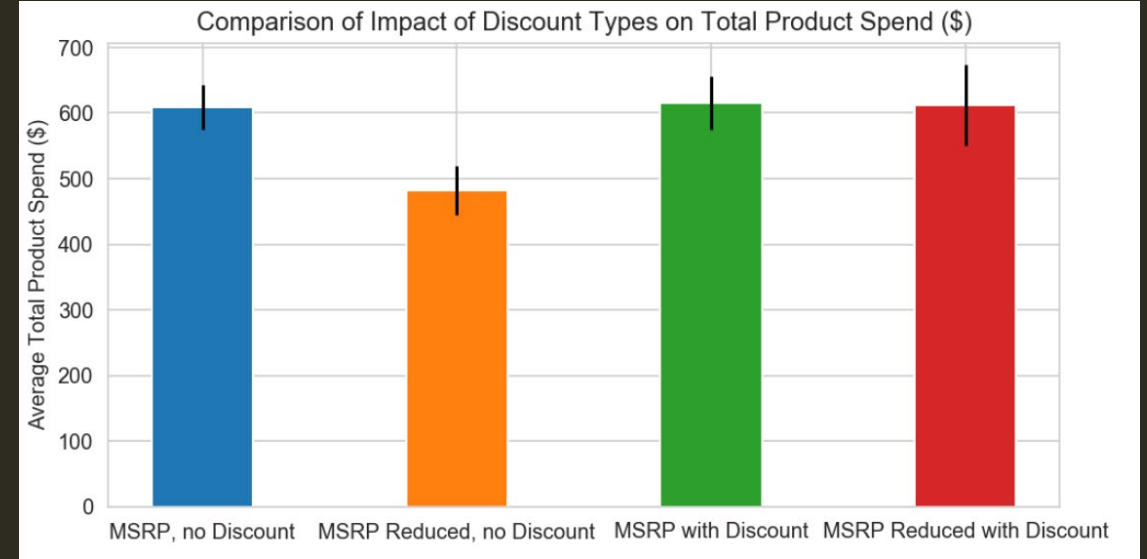
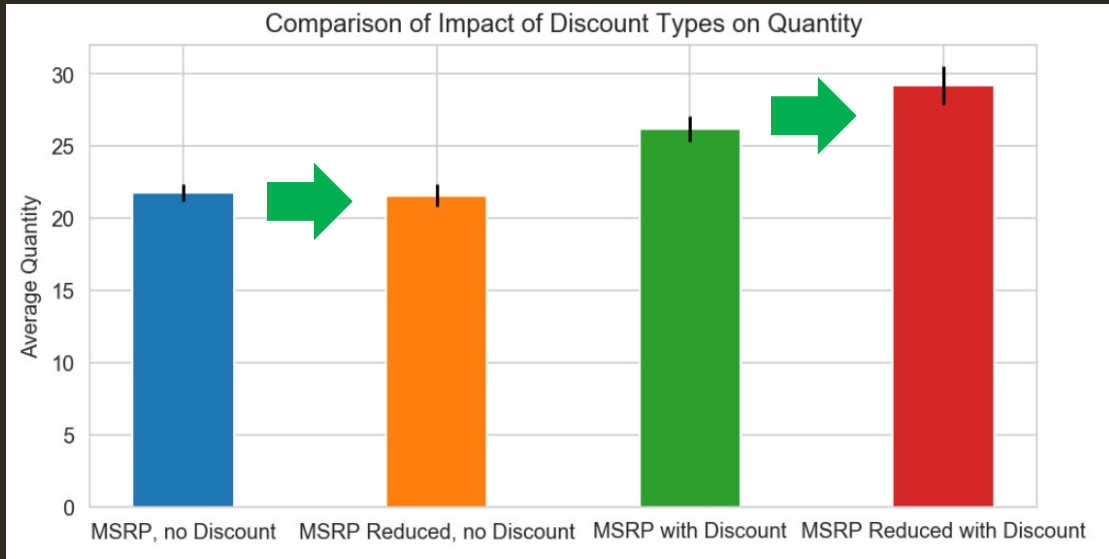


Product Spend

Multiple Comparison of Means - Tukey HSD, FWER=0.05

group1	group2	meandiff	p-adj	lower	upper	reject
MSRP+Disc	MSRP, no Disc	-7.4143	0.9	-139.4482	124.6196	False
MSRP+Disc	Reduced MSRP+Disc	-4.363	0.9	-191.1244	182.3984	False
MSRP+Disc	Reduced MSRP,no Disc	-133.8174	0.1438	-295.3164	27.6815	False
MSRP, no Disc	Reduced MSRP+Disc	3.0513	0.9	-173.0225	179.125	False
MSRP, no Disc	Reduced MSRP,no Disc	-126.4032	0.1287	-275.4134	22.607	False
Reduced MSRP+Disc	Reduced MSRP,no Disc	-129.4544	0.3394	-328.5798	69.6709	False





**MSRP REDUCTION HAS NO IMPACT ON
QUANTITY ORDERED**

MSRP reduction trend is
that there is no positive
impact on Product spend

* Indicates significant impact, p-value < 0.05