

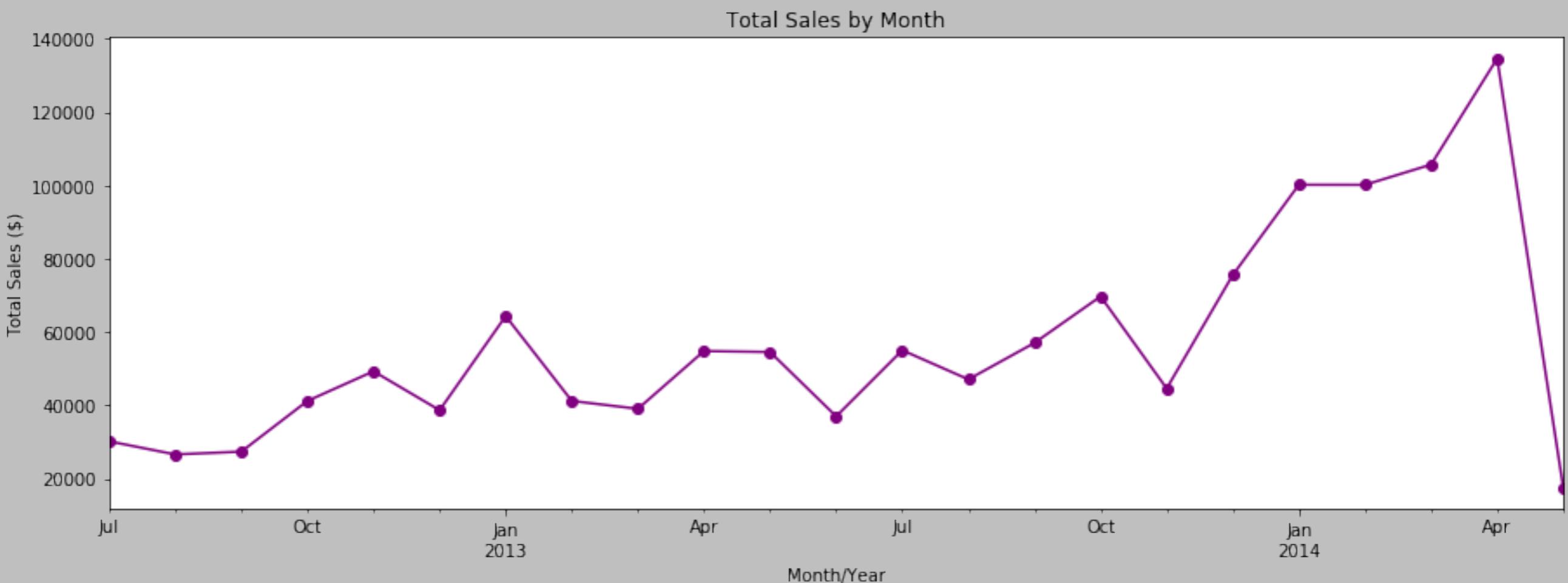
NORTHWIND

IMPROVING PROFITABILITY



BACKGROUND

- Successful importer/exporter of food and drink
- Growing sales
- Declining Profitability



OBJECTIVE

Identify strategy to reverse decline in profitability



INVESTIGATION

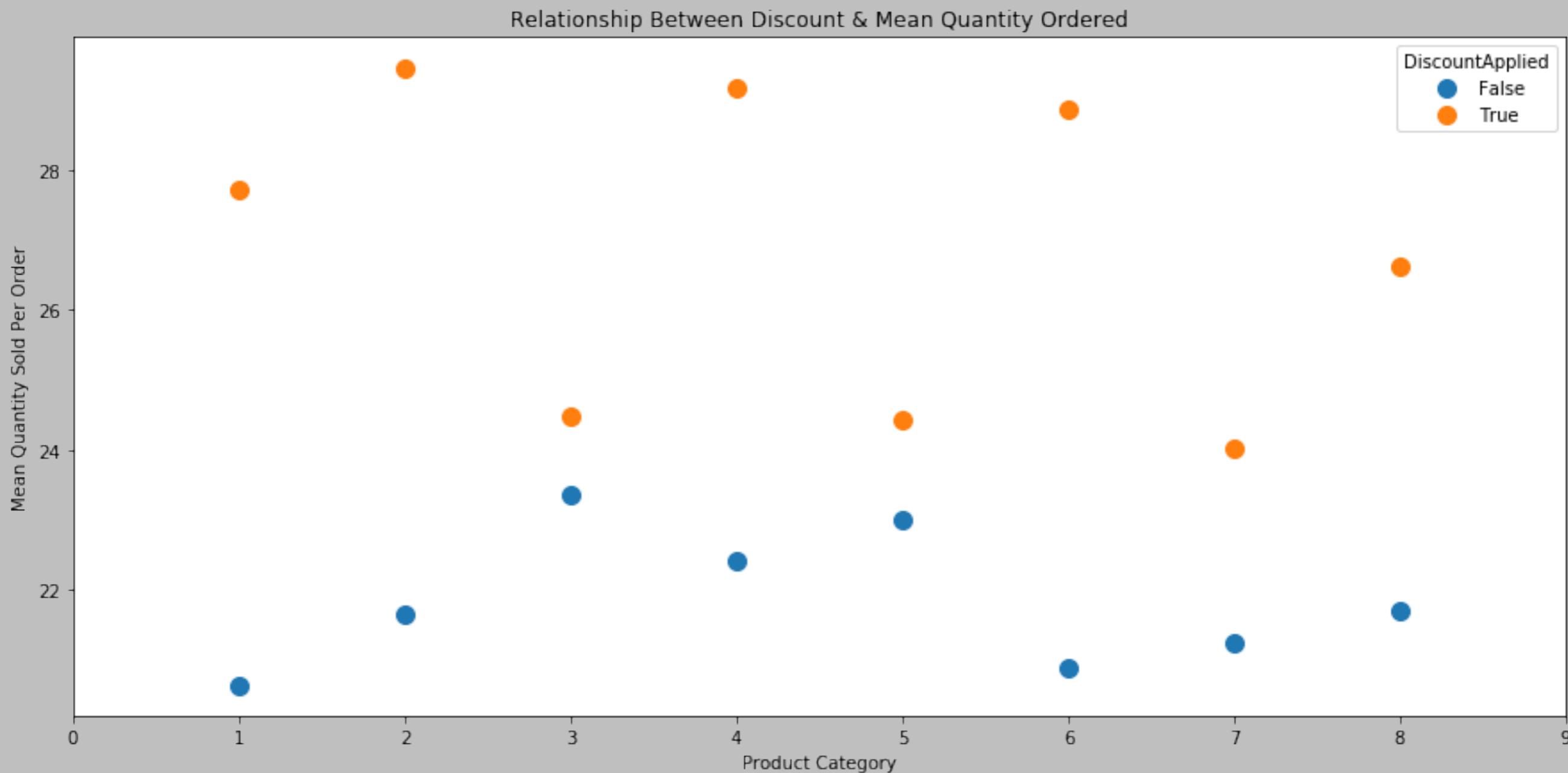
1. Discounts
2. UK Sales Office
3. Slow-Moving Stock

METHODOLOGY

Hypothesis Test: Statistical test with goal of accepting or rejecting a null hypothesis.

Null Hypothesis: No variation exists between two groups.

IMPACT OF DISCOUNTS



IMPACT OF DISCOUNTS

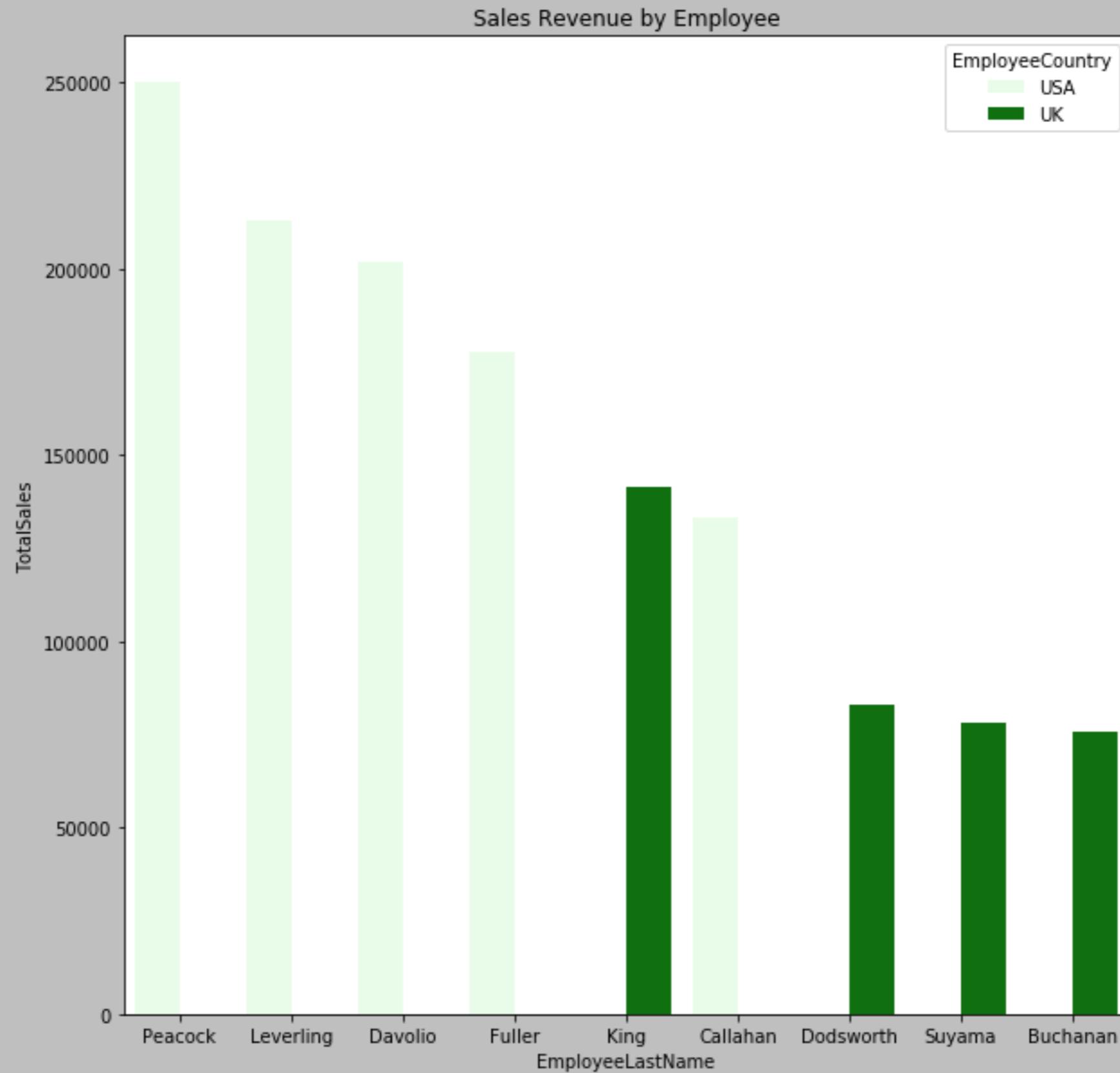
Null Hypothesis: Discount has no effect on the quantity of a product in an order.

Conclusion

- Discounts do not have an effect on the quantity of a product in an order.
- Erosion of profit margins without corresponding increase in revenue.
- Greater control of discounts required.



IMPACT OF SALES OFFICE



IMPACT OF LOCATION

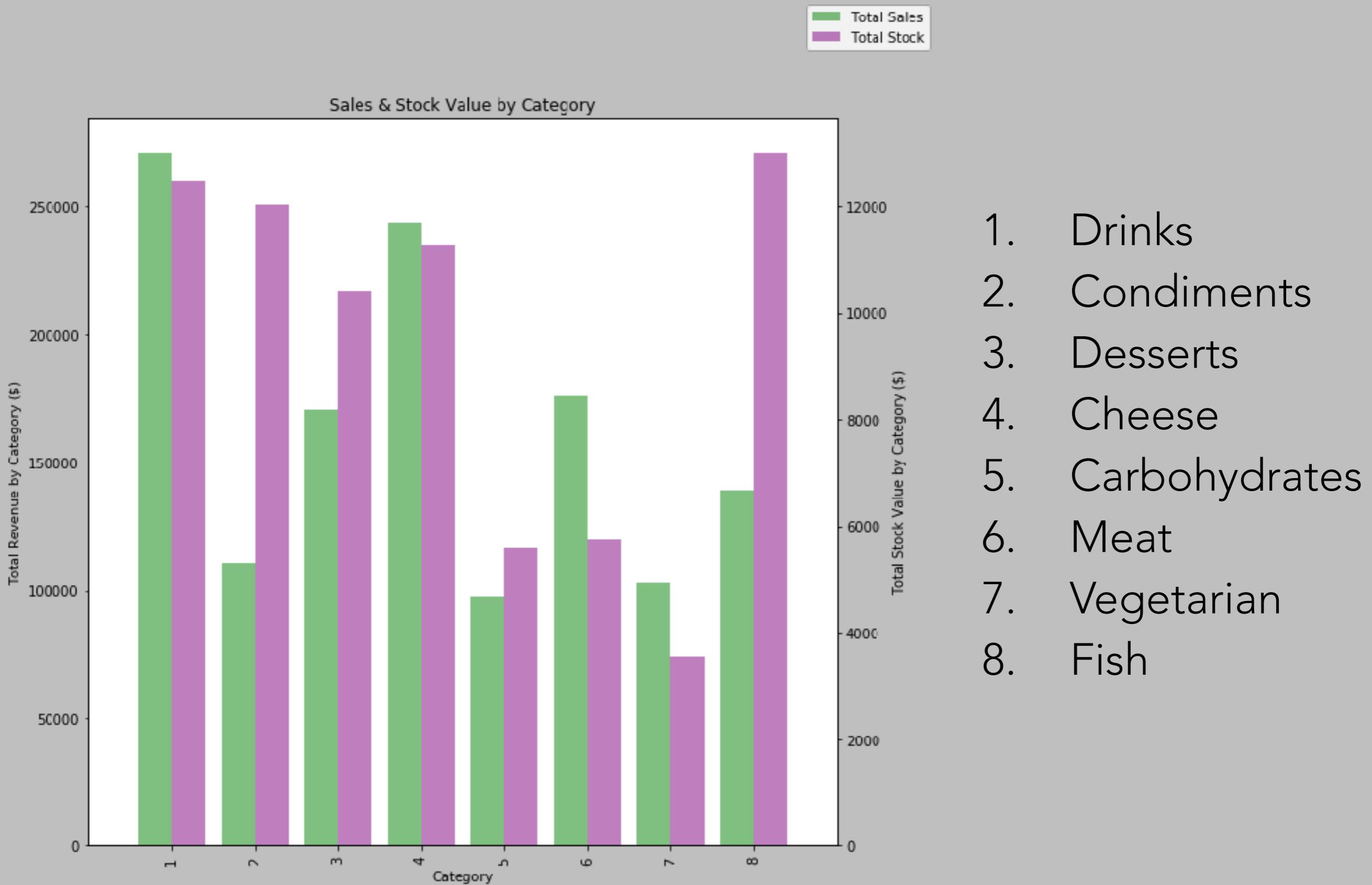
Null Hypothesis: Location has no effect on sales performance of an employee.

Conclusion

- Evidence suggests UK employees are under-performing.
- The effect of location on sales is large.
- Sales training and rigorous targets
- Cost of UK office may not be justified.



IMPACT OF PRODUCT CATEGORY



FISH PRODUCTS

Null Hypothesis: There is no difference in mean sales value of fish products versus other products.

Conclusion

- Insufficient evidence to reject null hypothesis.
- Effect size is small.
- No case for retiring fish product line
- Case for reducing stock levels of fish



SUMMARY OF RECOMMENDATIONS

1. Restrict ability of sales team to grant discounts
2. Training and rigorous sales targets for UK sales team
3. Reduce levels of stock for slow-moving lines

FUTURE WORK

- Product level study
- Cost analysis
- Assess impact of measures



“Thank you for listening”

APPENDIX: DATABASE SCHEMA

