

To Discount or Not To Discount - Data Driven Analysis Of Eniac's Price Strategy.

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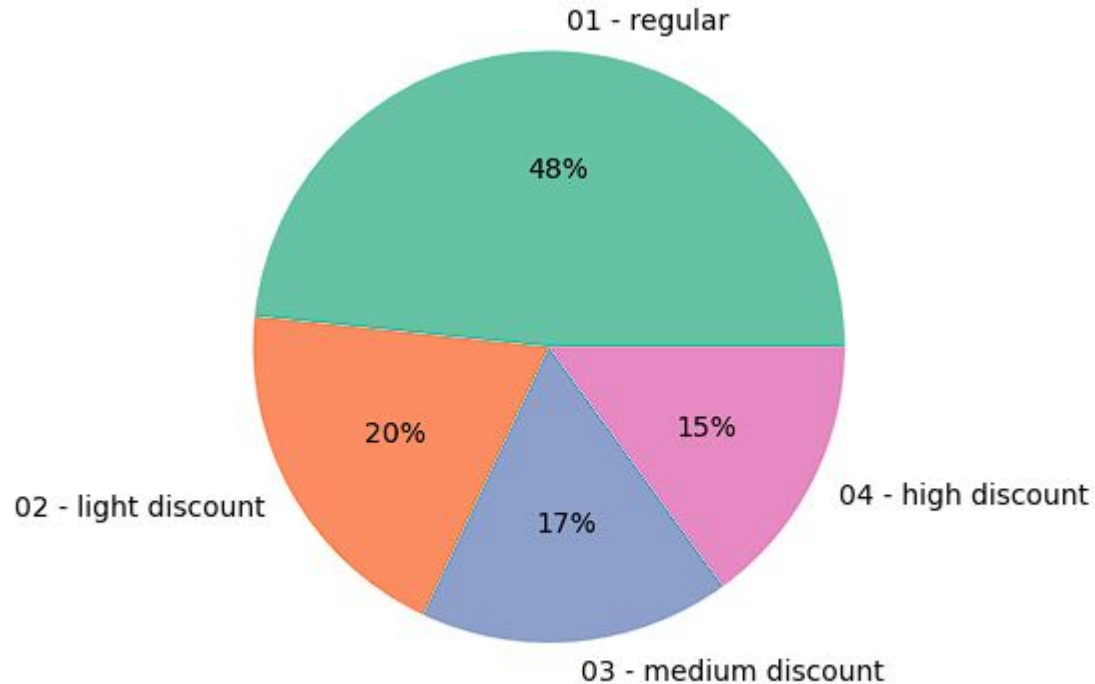
Objectives

- Analysis of database from 2017-01 until 2018-03
- Recommendations on Discount Policy
- Seasonal Price Distribution
- Opportunities for Data Enhancement

Data Quality Problems in Sales Database

- 80% of incomplete orders removed from analysis
- 12% of order lines were corrupted → fixed
- 3% of price records were corrupted → fixed
- 90% of discount price records were corrupted → fixed
- Semantic categories restored from numerical product type
- Sufficient quality achieved

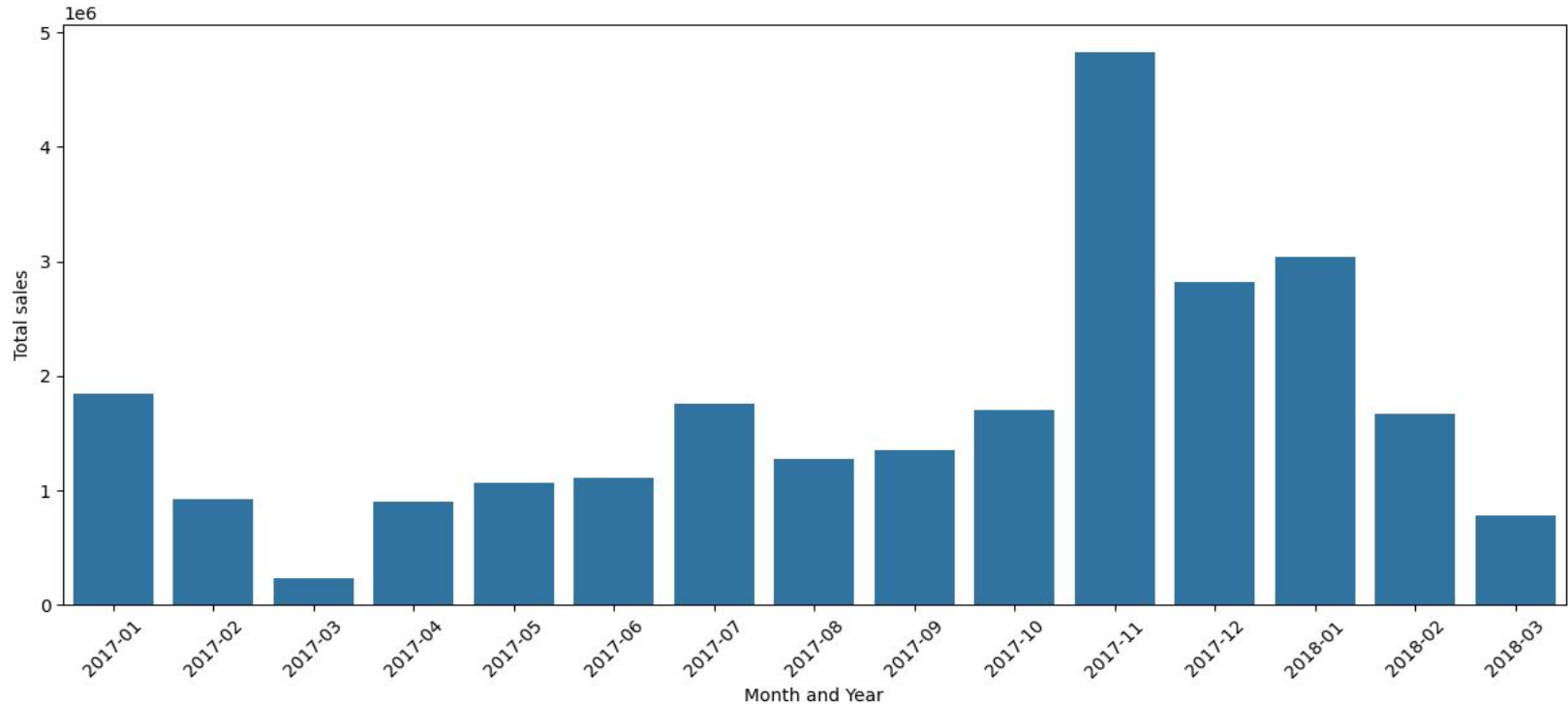
Overall revenue distribution



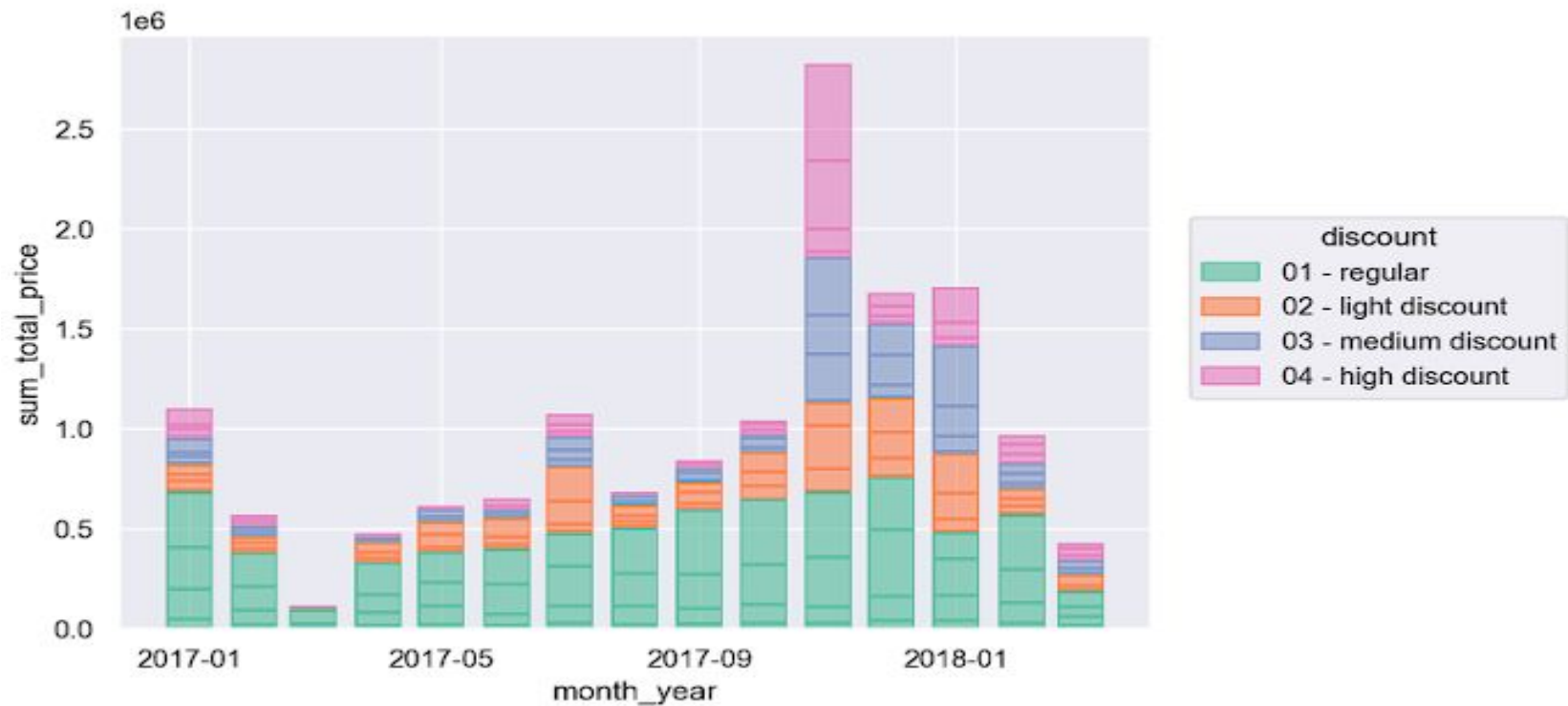
- About 50% of the revenue comes from undiscounted products
- Using quartiles per product from orderlines table

Seasonality Trends

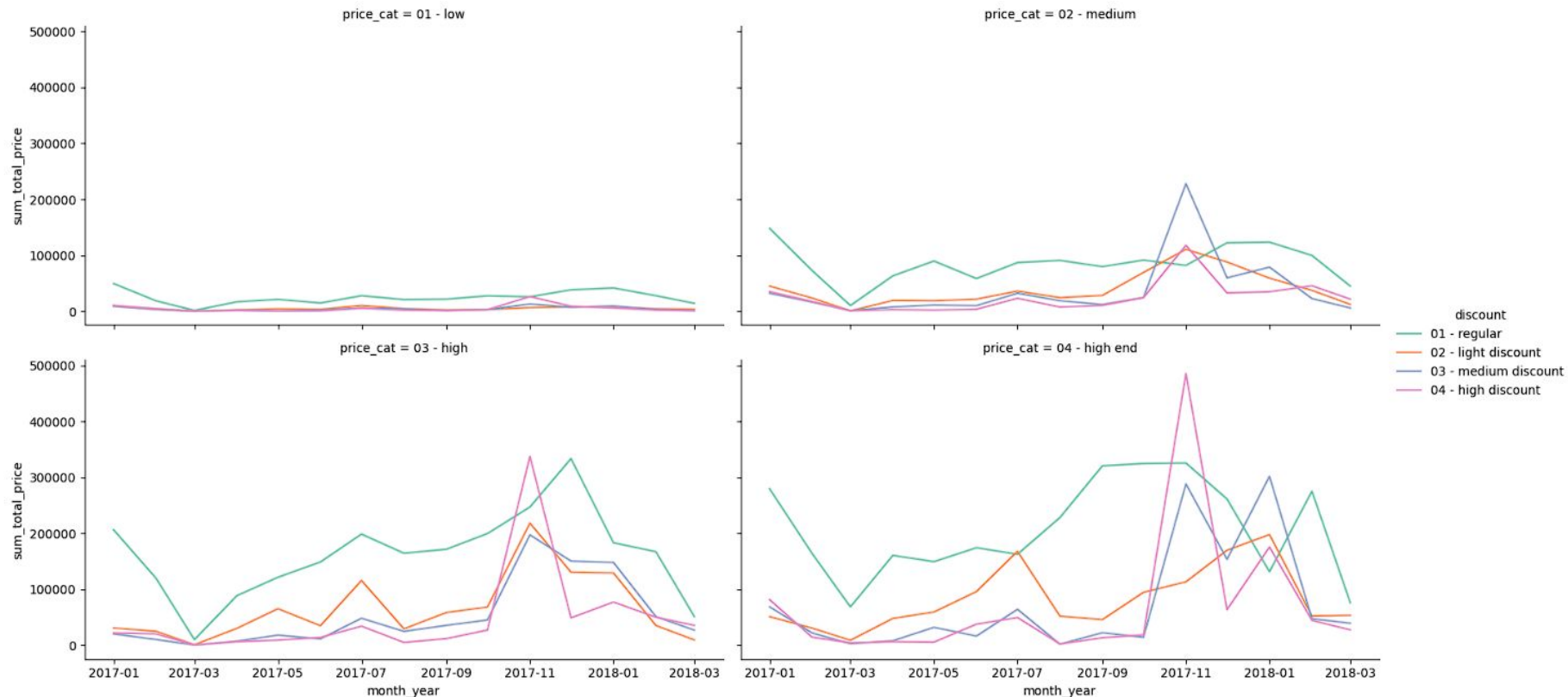
- A relationship between sales and special events like Black Friday and Christmas.



Distribution over time



Distribution over product price categories



Conclusions

- Focus on seasonal (Black Friday/Christmas) discounts
- January discounts make sense
- All-year discounts have low impact on sales

Technical recommendations:

- Production database repair
- Clear interface definitions
- Data-quality monitoring