

Gilt: Comeback with Data Analytics



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"If you torture the Data long enough, it will confess" – Ronald H. Coase

1. Background and Introduction



Gilt is an online shopping website launched in 2007 that focuses on flash sales of premium brands with big discounts in the US. Starting off exclusively for women's clothing and accessories, Gilt added menswear, a travel site, home accessories and kids and baby clothes to it's portfolio. In 2011 Gilt was valued at over \$1billion, and one of the most promising start ups in the fashion industry. At the beginning of 2016 Gilt was sold for only \$250million to Hudson Bay Company.

Building on sales data, using research, descriptive analytics and machine learning techniques, we gain business insights to advise Gilt focusing on the following questions:

- Why did Gilt lose value so dramatically after reaching unicorn status?
- How can Gilt improve its position?



3. Past Performance / Current Situation

Gilt's early success (-2012):

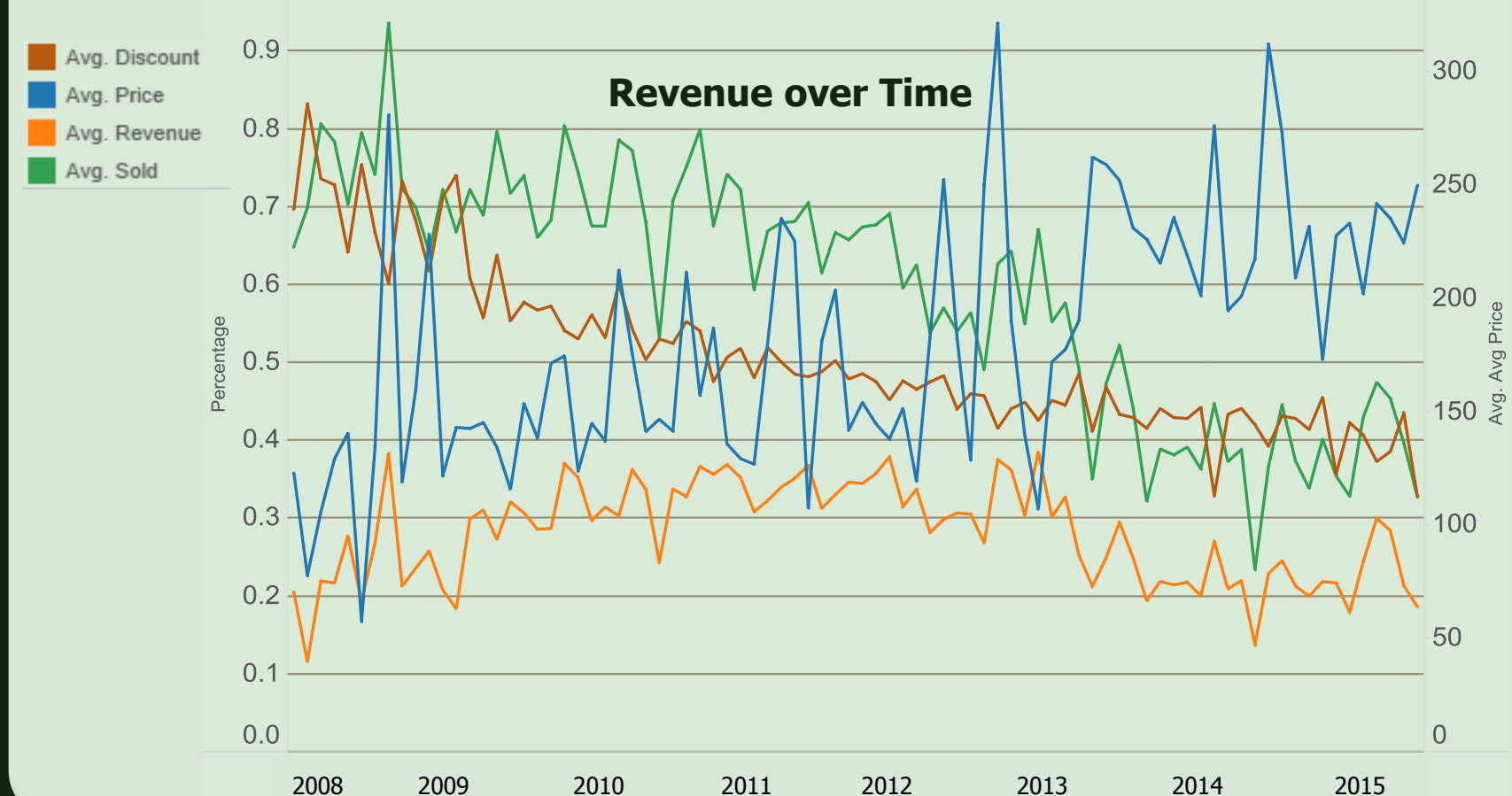
- Innovative concept
- High discount sales
- Less competition
- Excessive inventory

Gilt's struggle (2012-2015):

- Less inventory
- Competitive online market
- Decreased discounts
- Missed out on innovation & trends

Gilt's current situation (2016):

- Competitive, saturated market
- Unsuccessful diversification
- Inability to lower prices



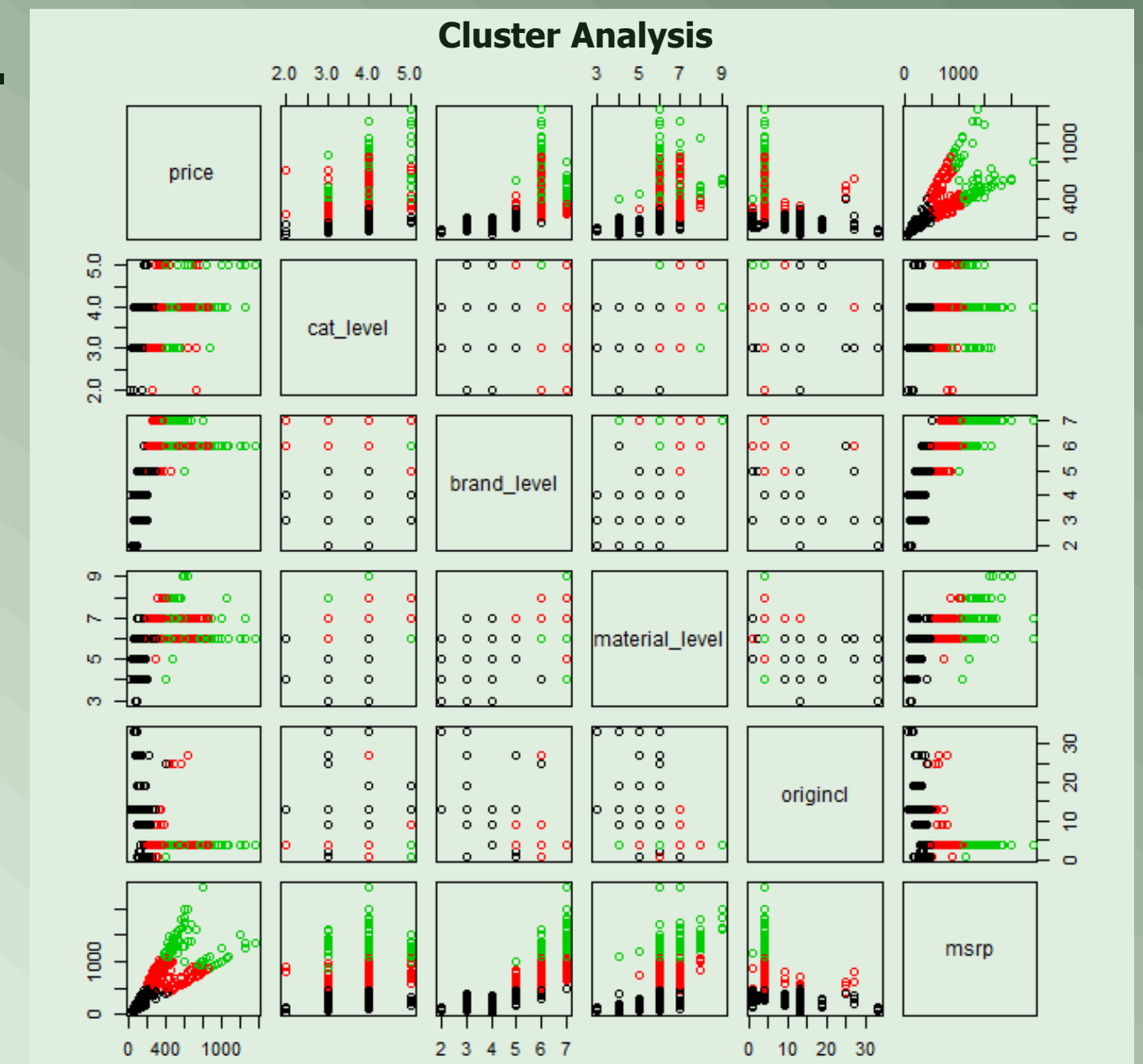
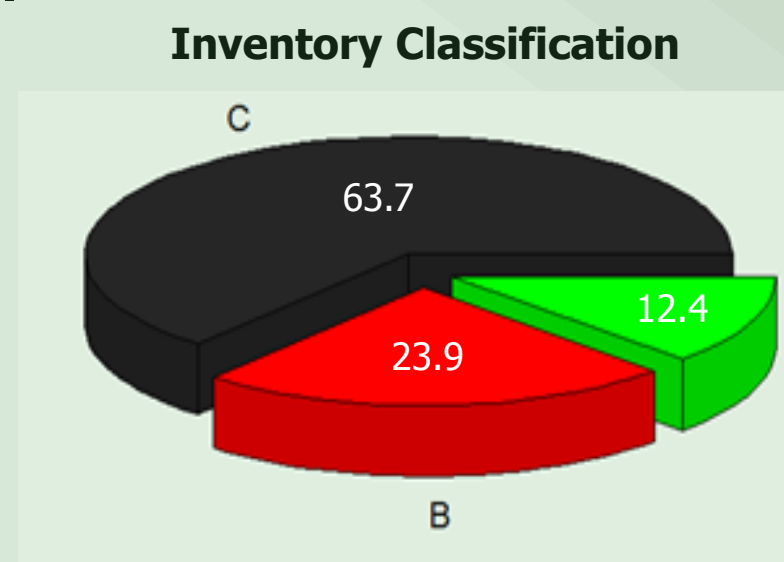
Given Gilt's limited growth potential, we use data analytics to improve Gilt's competitiveness by optimizing its operations and specifically differentiating its strategy to a more customer targeted focus. Therefore we are looking at three key areas:

- Increase Sold Rate
- Decrease Inventory Cost
- Increase Customer Satisfaction

3.2 Decrease Inventory Cost

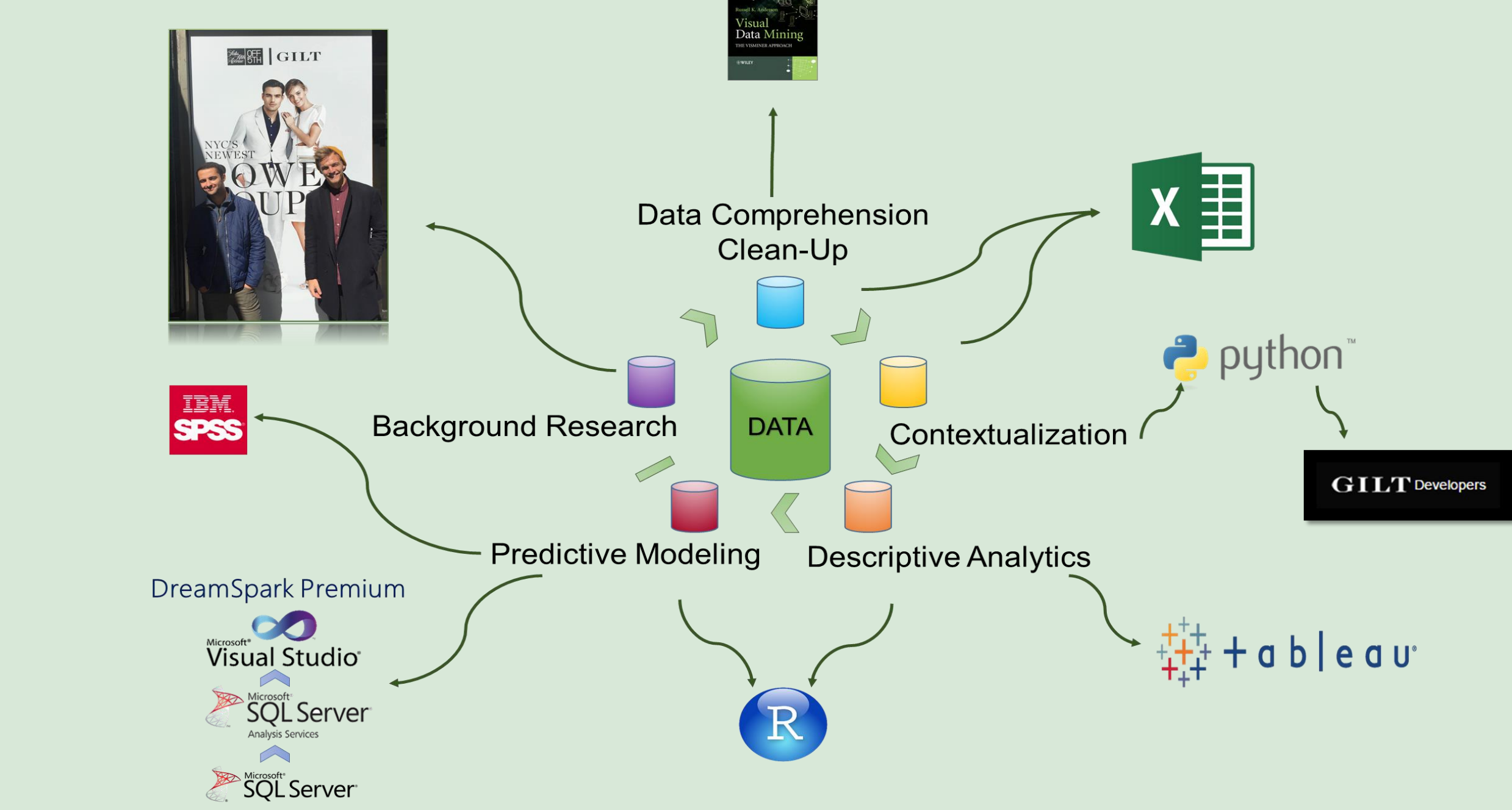
Inventory is a huge part of Cost. A Classification into ABC inventory will allow Gilt a more effective utilization of Inventory.

Using price, category, brand, material, origin and MSRP we can classify every product into A,B or C.



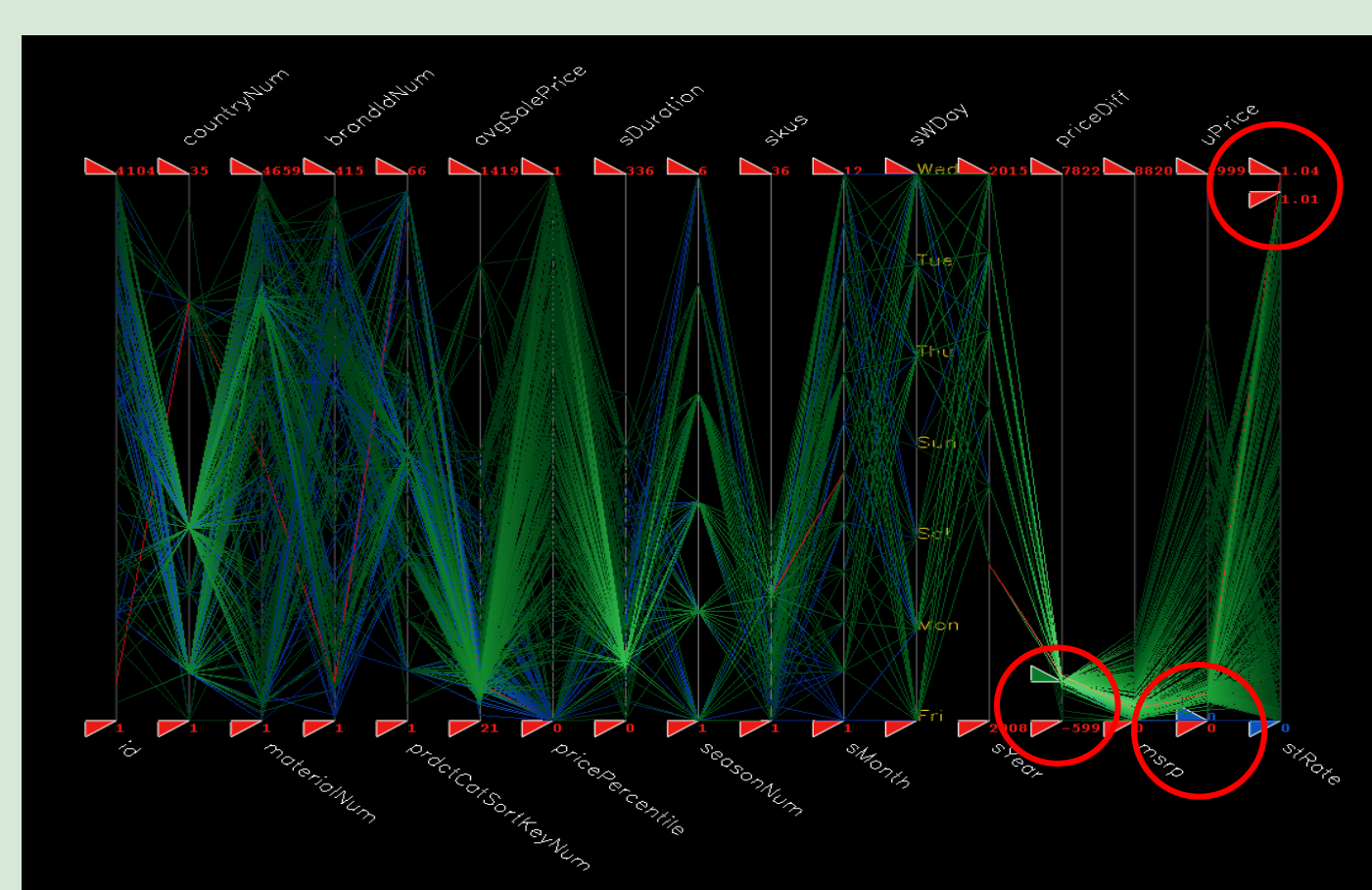
2. Methodology

The Toolbox:



Data Repurposing & Clean Up:

- Discarded unreasonable Data
- Lower date resolutions Year, Month, Day of the Week
- Created new Derived Variables, Discount, Time on Sale, Categorization of Brands, Material & Categories ...



Data Contextualization:

Comparison: Original curled JSON response to cleaned Example.

```
"NAME": "FILLMORE LOAFER",
"HTTPS://API.GILT.COM/V1/PRODUCTS/1147478555/DETAIL.JSON"
"MSRP_PRICE": "125.00",
"SALE_PRICE": "79.00",
"COLOR": "BLACK",
"ORIGIN": "MEXICO",
"MATERIAL": "LEATHER, CANVAS and RUBBER",
"BRAND": "BED: STU",
"CATEGORIES": ["LOAFERS & DRIVERS", "SHOES", "MEN", "LOAFERS & DRIVERS", "FOOTWEAR"]
```

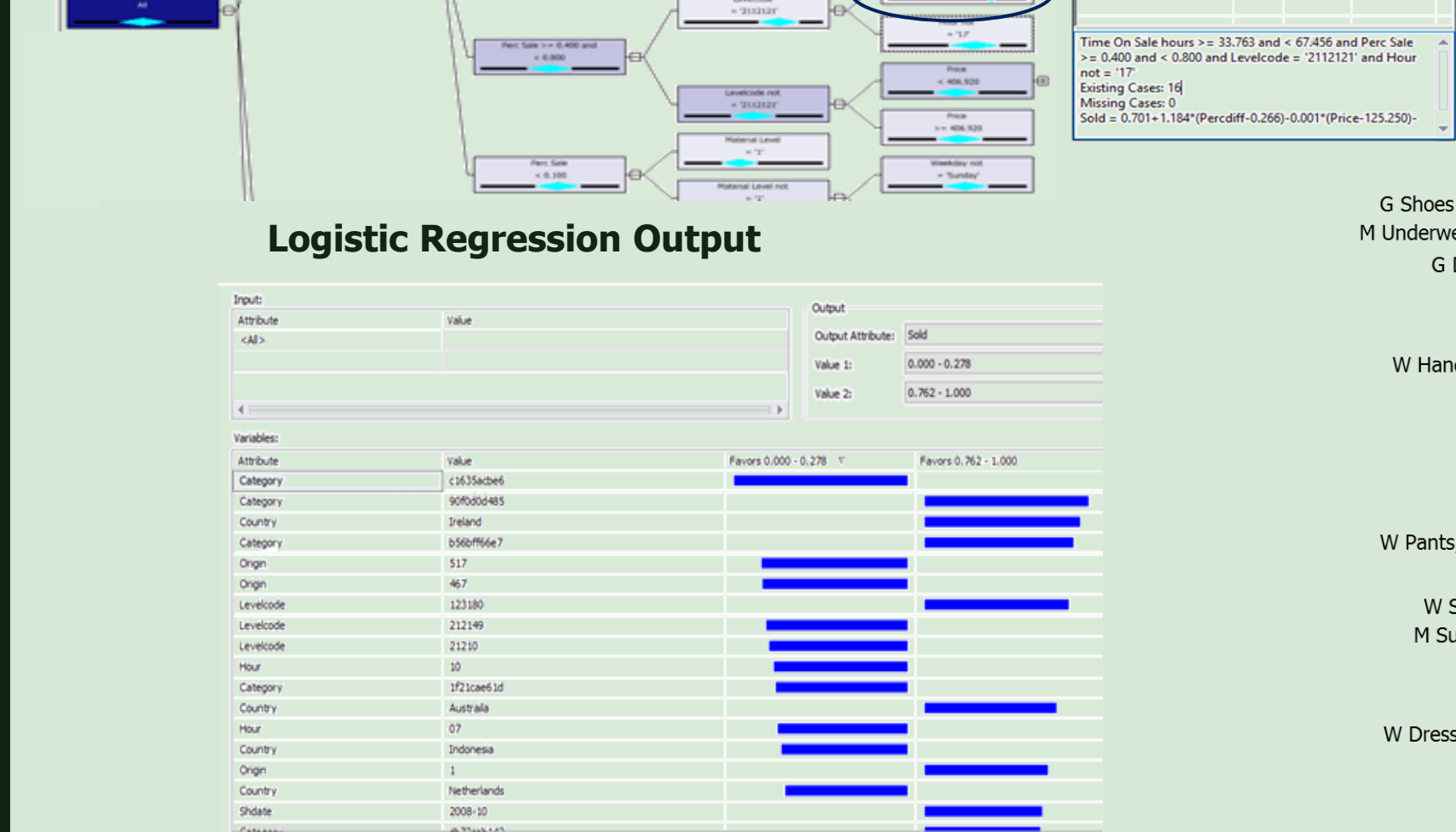
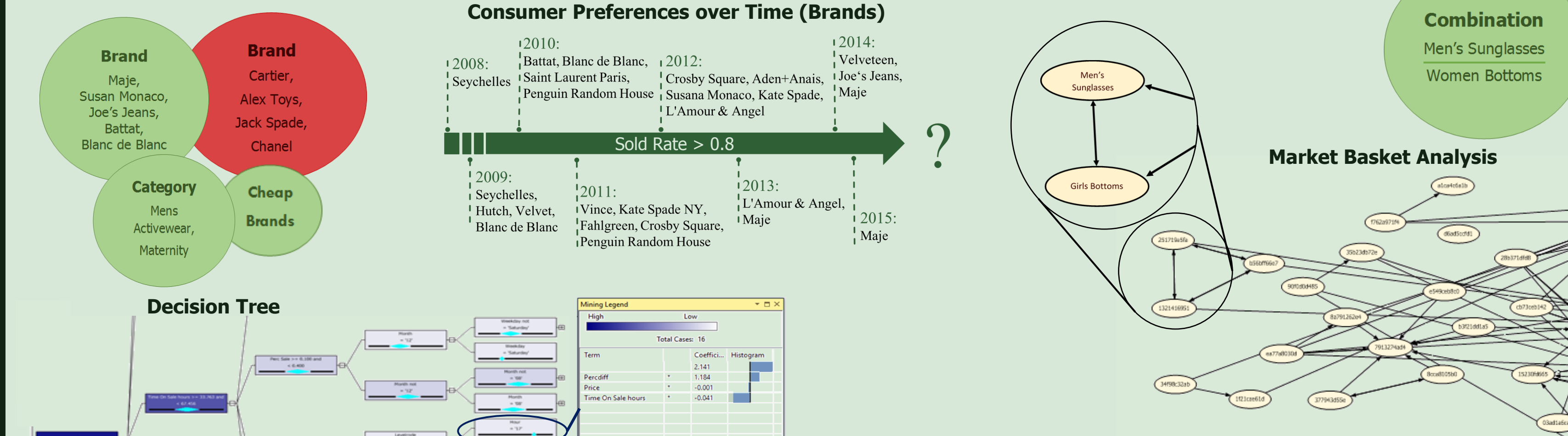
Gilt Python API

We used Sales from the Website to contextualize Category and Brand

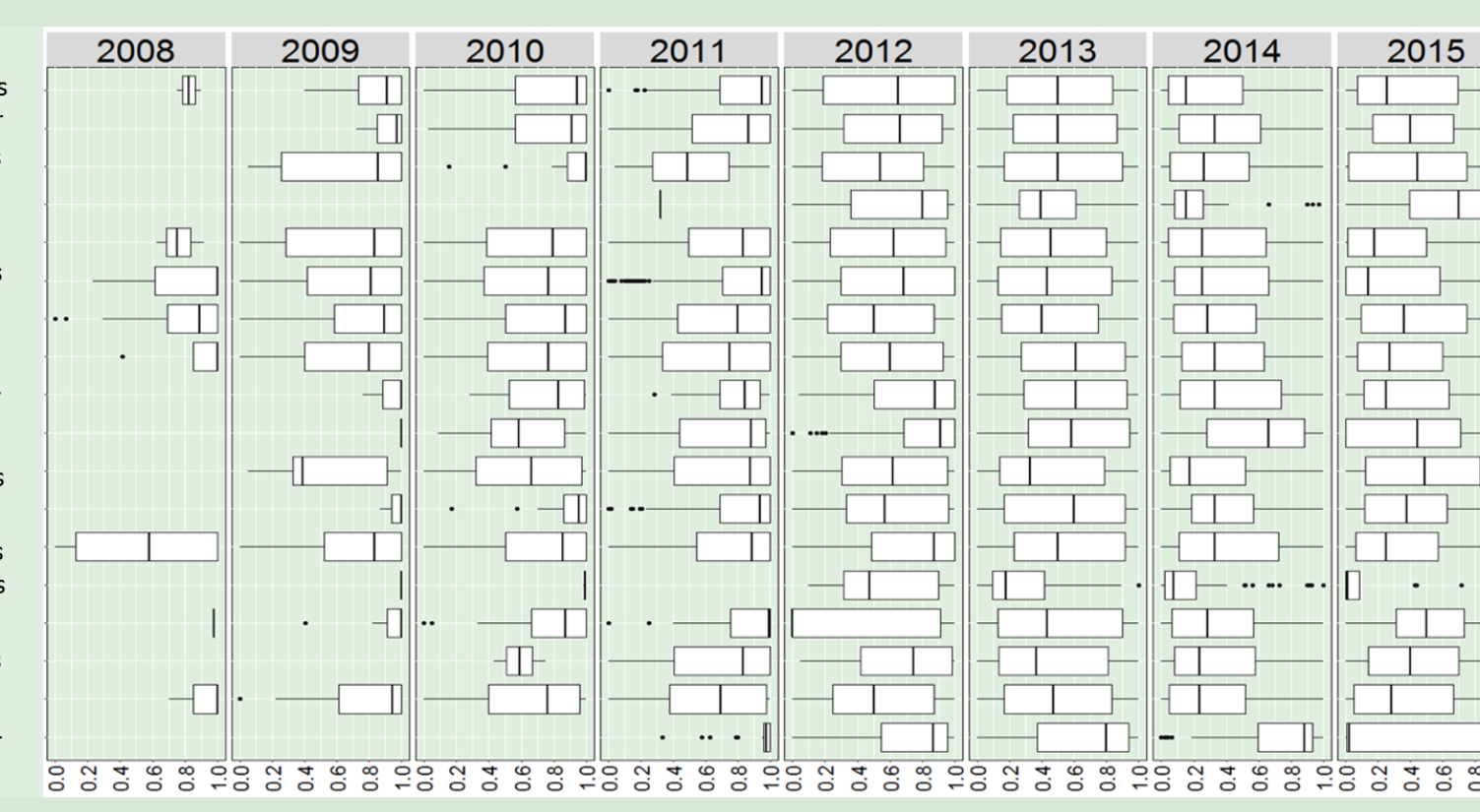
3.1 Increase Sold Rate



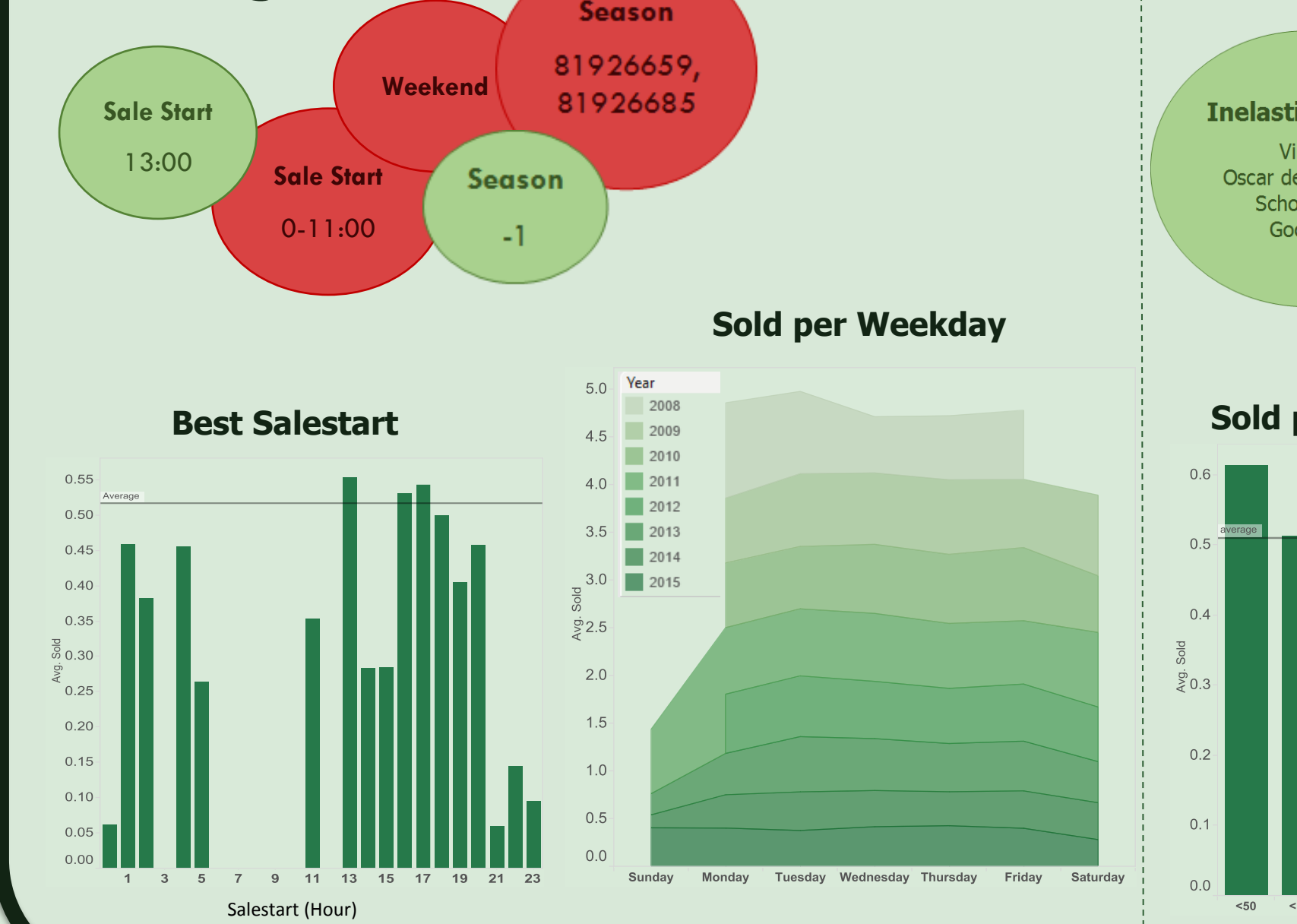
1. Consumer Preferences:



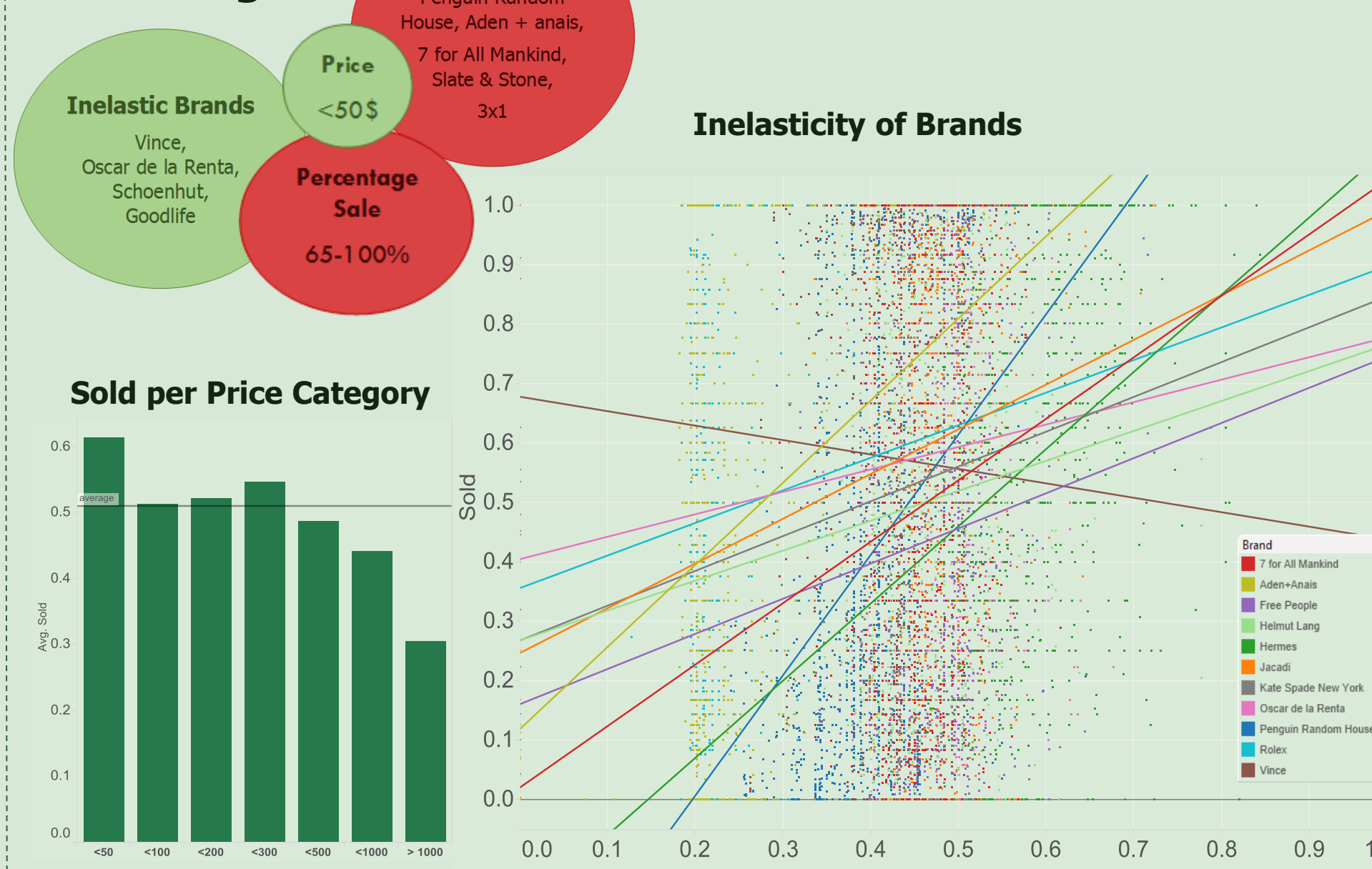
Sold Rate over Time per Category



2. Timing:

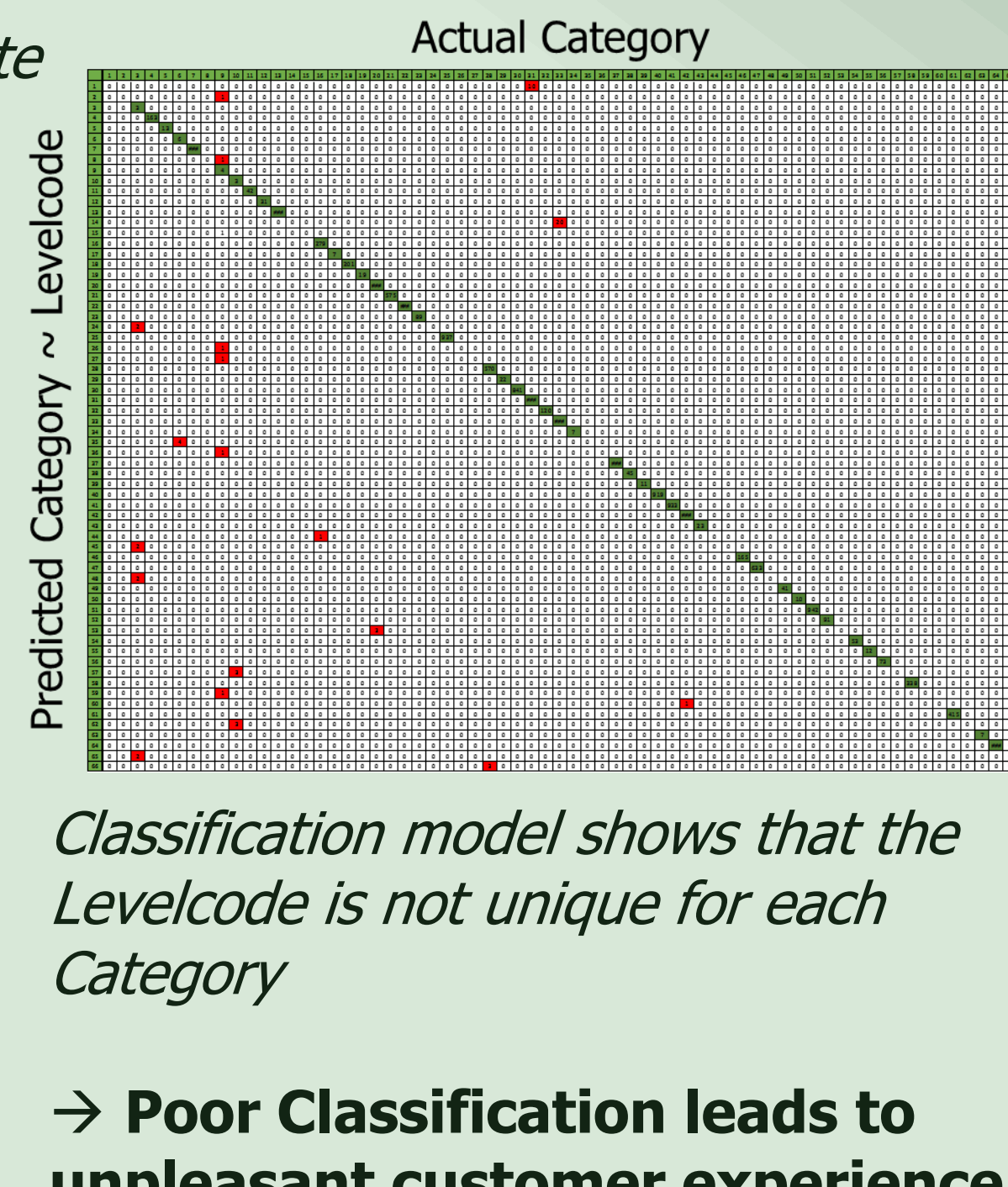
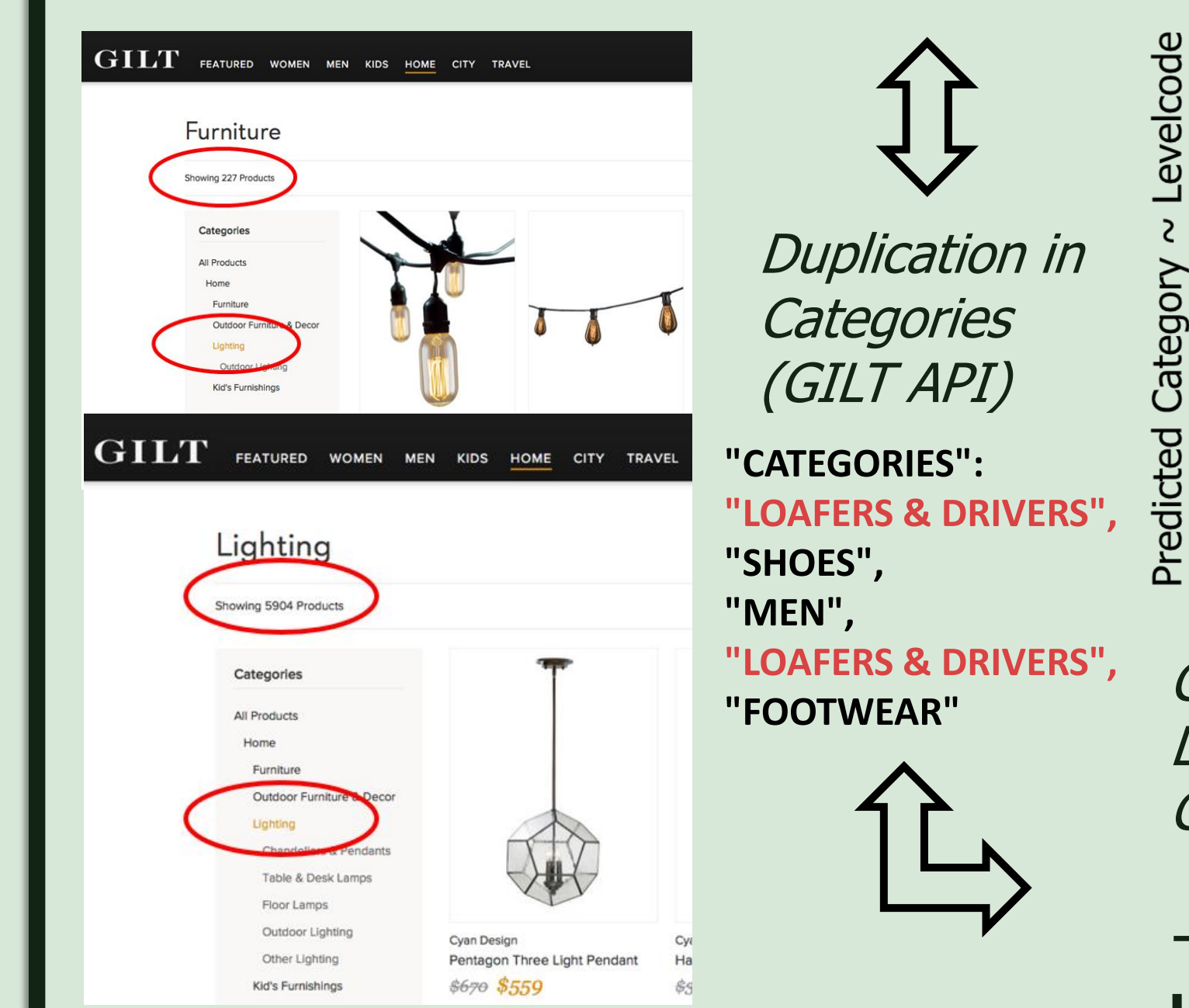


3. Pricing:



3.3 Increase Customer Satisfaction

Inconsistency and Confusion on Gilt's Website



Classification model shows that the Levelcode is not unique for each Category

→ Poor Classification leads to unpleasant customer experience

4. Conclusion

- Gilt needs to refocus on its core competencies, flash sales of designer clothing and accessories at high discounts. Given the inability to compete on a price basis against competitors, **Gilt should use a differentiation strategy, using data analytics to specifically target its customers and their preferences.**
- Gilt can make the following operational improvements:
 - Sold rate:** Smarter timing, pricing and analysis of customer preferences
 - Cost:** Efficient ABC- Inventory classification
 - Customer Experience:** Improved classification system and website
- For a deeper analysis we would look at customer data, as well as competitors. Supplier prices and inventory data would help with further cost reductions.
- Further information on the company could help developing a better strategy, eventually leading to an expansion into foreign markets.

5. References

- Gilt API - <https://dev.gilt.com/documentation/overview.html>
- D'Onfro, Jillian. "Gilt Groupe - Here's What Happened." Business Insider, 21 Feb. 2015.
- Primack, Dan. "Gilt Groupe Was A Different Type of 'Unicorn'" Fortune, 07 Jan. 2016.