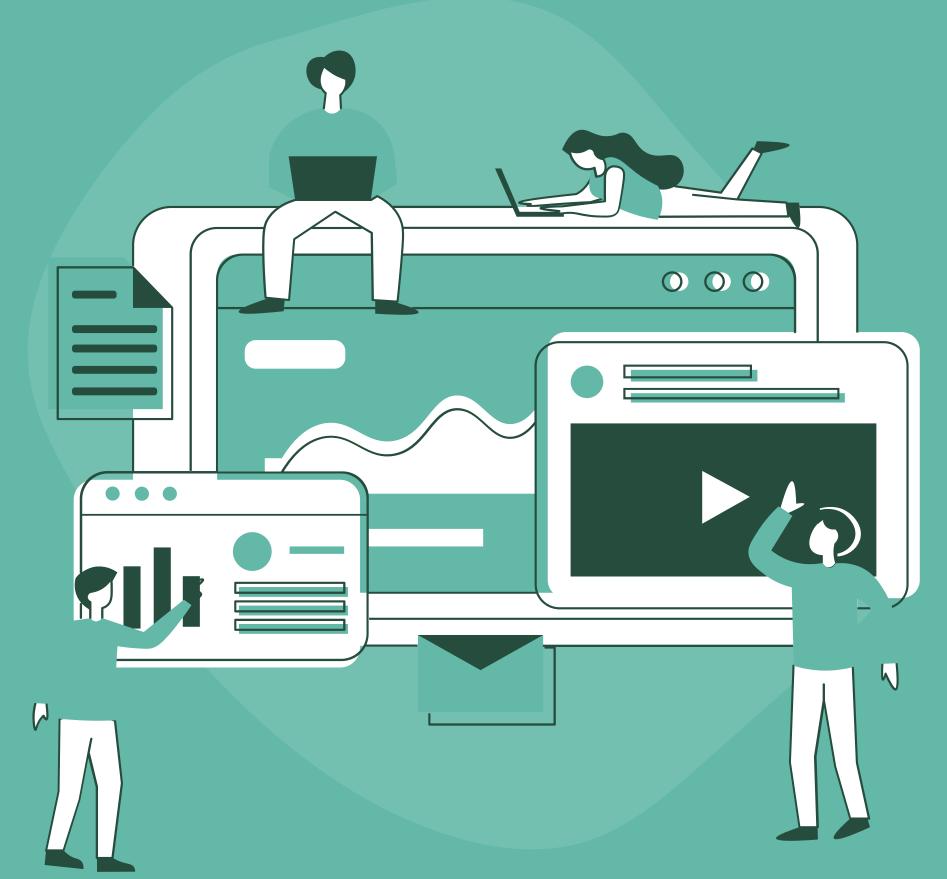
Pricing Strategy for Pernalonga



Team 4 - Neha Bansal, Ryan Chen, Nirja Mistry

Agenda

- Progress Update
- Clarify Path Forward
- Example Deliverables
- Timeline and Next Steps



Target Categories

25% of the categories of products sold at Pernalonga are responsible for 65% of Pernalonga's overall sales

Target Store-Product Pairs

Identified the store with the highest number of target categories being sold and then looked at what stores have the most number of target categories in common

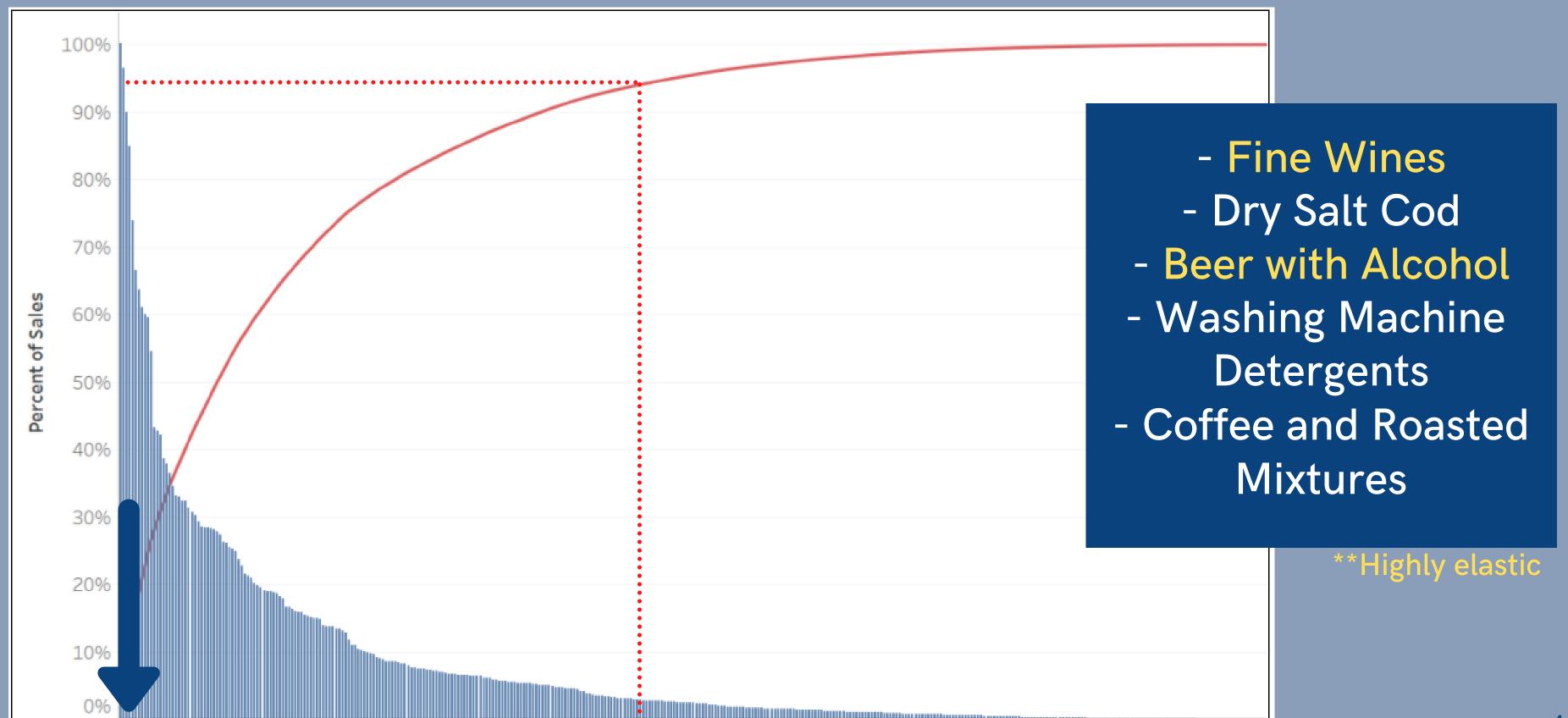
Modeling

Moved from a Linear Demand Model to a Logit Demand Model

Demand Response Function & Elasticity

Calculated expected demand at different price points to find the optimal price that maximizes revenue and calculated elasticity to narrow down store-product pairs

Target Categories



Complement Goods

Good that is frequently purchased with our target categories

Association Rules using different levels of confidence
20% - no meaningful pairs
60% - yielded stronger
complements

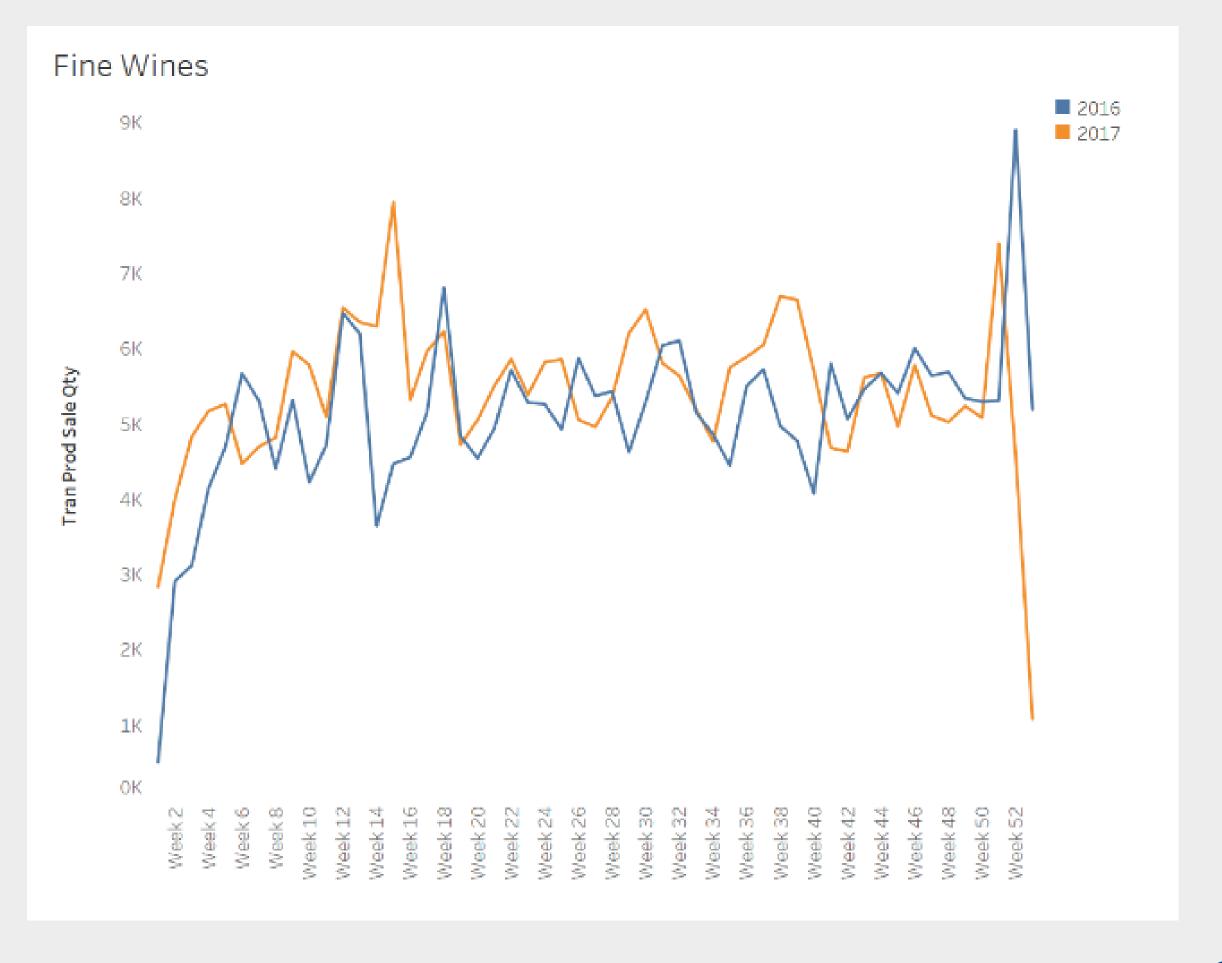
Substitute Goods

Goods that are similar or comparable to items in our target categories

Association Rules using Lift < 1
too wide a range
Currently testing negative
correlations of products
(Subcategory level)

Seasonality + Holidays

Understand trends, impact of holidays, seasonality of products



Demand Response Function

Predicting sales volume on a weekly basis

C/S

Price On average, the weekly price being offered for this product Discount On average, the weekly discount being offered on this product D **Trend** The week of the year this price is for Seasonality S Seasonality Index for this product

H Holiday Whether a holiday occured during this week or not

Complement/
Substitute

Price of it's complement/substitute good

Deliverables

Annualized returns for 100 products in 2 Categories for 10 stores

Store ID	Change in Sales Amount	Profitability
342	43230	22817
344	19311.5	13216.5
345	11171	7620
398	17148	9776
588	10818	5431.5
349	22685.5	11123
346	14743.5	7767
341	17111.5	9932
343	12325	6464.5
335	17640	7624
Total	€ 186,184.00	€ 101,771.50

Deliverables

Products with Recommended Price Changes for Store 342

Product	Category	Old Price	New Price			
999156842	Fine Wine	3.99	4.99			
999301596	Fine Wine	1.49	0.88			
999301585	Fine Wine	2.49	1.21			
999289703	Fine Wine	1.34	1.79			
999271525	Fine Wine	1.99	1.14			
999358585	Fine Wine	2.69	1.42			
999276391	Fine Wine	1.99	1.19			
999726858	Beer with Alcohol	0.99	1.16			
999598955	Beer with Alcohol	0.88	1.14			
999345354	Beer with Alcohol	15.99	20.55			

Timeline & Next Steps

- Fine tune Logit Demand Model
- Run final Model
- Prepare Client Deliverables
 - List of 100 products
 - List of 10 stores with changes in sales, revenue, and profitability
 - Communication Plan for Pernalonga
- New profit opportunities

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17
Data Understanding and Business Problem Understanding																	
Background Research																	
Data Cleaning and Preparation																	
Data Exploration																	
Target Store-Product Pairs																	
Logit Demand Model																	
Midpoint Review												*					
Refine Analysis																	
Finalize Analysis																	
Final Presentation																	*

Questions?

