

## Observations of Years 2015-2018 for Year 1 Decisions

### Target Audience, Brand Attribute, Trade and Advertising Channel, and Formulation

The simulation case describes the focus of each company. The brand attribute for Turbo is a “souped-up” brand with more cleaning power. Turbo focuses its marketing on digital ads and makes millennials its target. This generation is usually defined as people born from 1981 to 1996, so they are around 23 - 38 years of age (considering the first year of the simulation will take place in 2018). Turbo also puts more emphasis in selling their products in larger trade channels such as Walmart and Target. They focus their formula on liquids and pods.

The brand attribute for Fresh is “a fresh, clean smell for the clothes washed in it. Fresh intended to have their ads target the youth, but instead decided to market their product on daytime television. Unfortunately, most youths are in school for the better part of the day. The main channels they used to sell their products are mid-sized grocery chains and their price on their product is only \$1 more than Blue’s. The most sales Fresh makes are in their powder formulas.

Not much can be said about generic store brands. Their strong point is the low price of their detergent. No marketing or target audience is stated.

The description of Blue does not put them in a good spot. They are branded by consumers as ‘unexciting.’ By analyzing historical data of Blue and its competitors as well as their attributes, I can make informed decisions to improve the business.

### Price Elasticity of Demand

Price Elasticity of Demand = Percentage change in demand / Percentage change in price

Looking at the Pricing tab in the Reports, the only companies that altered their price are Turbo and generic store brands. The PED will be calculated below.

In 2017, Turbo increased their price from \$9 to \$10. The demand from 2016 to 2017 went from 131,691,340 to 119,996,773.

$$\% \text{ decrease of Demand} = ((131,691,340 - 119,996,773)/131,691,340) * 100 = \% - 8.8$$

$$\% \text{ increase in Price} = ((10 - 9)/9) * 100 = \% 11.1$$

$$\text{Price Elasticity of Demand} = \frac{-8.8}{11.1} = -0.79$$

A **PED of -0.79** is considered inelastic. This is reflected by looking at the revenues generated in 2016 and 2017. Turbo generated \$1,185,222,060 in 2016 and \$1,199,667,730 in 2017. This is a %1.2 increase which is small.

In 2018, Stores increased the price of their generic product from \$5 to \$6. The demand from 2017 to 2018 went from 47,977,196 to 35,272,894.

$$\% \text{ decrease of Demand} = ((47,977,196 - 35,272,894)/47,977,196) * 100 = \% - 26.5$$

$$\% \text{ increase in Price} = ((5 - 6)/5) * 100 = \%20$$

$$\text{Price Elasticity of Demand} = \frac{-26.5}{20} = -1.325$$

A **PED of -1.325** is considered elastic. We can observe the change by looking at the revenues. On the Revenues tab, the revenue generated in 2017 was \$375,226,420 and \$325,783,866 in 2018. This is a %13 decrease.

## Looking at Trends

### Market Share

- Overall Turbo dominates the market at %44.6 in 2018
- The market shifts based on Region. (listed from highest to lowest in 2018)
- Northeast: Turbo > Fresh > Blue > Store
- Southeast: Fresh > Store > Turbo > Blue
- Central: Fresh > Turbo > Store > Blue
- West: Turbo > Fresh > Blue > Store

### Brand Demand

- Since Demand meets sales (no inventory), Brand Sales is the same.
- In the overall line graph with **no filters**, Blue is performing the worst.
- However, looking at people **under the age of 35**, we are performing better than the generic formulas sold in stores. Highest demand of 14 million from Blue VS 8.9 million from generic formulas.
- Moreover, filtering with people **under the age of 35** with a **household size of 4 and 5+** Blue performs better than Turbo and generic formulas. Fresh beats Blue with these filters with 10 million vs 9 million.
- Adding on to those filters with **Income under \$20,000** the demand for Blue is higher than all its competitors.
- To further illustrate this, **Geographic Demand** goes from 3.1 Unit Demand per Household by State to 5.4 units (5.8 without the income filter)

Overall in years 2015-2018, younger people with lower income and a larger household prefer Blue's products over its competitors. However, the highest the demand from Blue with ALL of these filters is 4 million which is not that big of a number. So in making decisions, I may omit filtering on income. Nevertheless, this provides good information to make a business decision for Year 1.

## Market Share

### Trade Channel Demand

- Income heavily affects this attribute. But with no filter, from greater demand to least demand is Convenience -> Club -> Grocery -> Mass
- Income under \$20000, there is a much greater demand for shopping in Convenience locations than other channels.
- \$20,000-\$39,999, there is a much greater demand for shopping in Club locations than other channels.
- \$40,000-\$59,999, there is a much greater demand for shopping in Mass locations than other channels.
- \$60,000 and Over, there is a much greater demand for shopping in Grocery locations than other channels.
- No other filters seem to shift the locations for Trade Channel Demand.

### Brand Attribute Demand

- Playing around with Brand Attribute Demand, the only filter that has a strong effect is **Region**.
- The **Northeast** region prefers Softness and Cold Water
- **Southeast** prefers Scent and Odor Elimination
- **Central** demands Odor Elimination, Cold Water, Scent, Softness (from greater to least demand)
- **West** prefers Cold Water, Odor elimination, Softness, Scent (greater to least demand)

The demand for Blue is stronger in the **West** and **Southeast** regions. Knowing which regions prefer which brand attribute will help me decide which brand attribute Blue should focus on. My current focus is on **Odor Elimination**.

### Formulation Demand

- **Household Size** has a big change on formulation demand whereas other filters do not. Demand will be listed from greatest to least. The quantity demanded will be listed if the margin between the is very large.
- Household size 1: Pods (27,361,039) > Liquid (13,909,055) > Powder (9,196,209)
- Household size 2: Pods > Liquid > Powder
- Household size 3: Pods and Liquid are of equal demand > Powder
- Household size 4: Pods > Liquid > Powder
- Household size 5+: Pods > Liquid > Powder

I am not sure if I should have Blue change their formulation to Pods as this would incur an increase of %15 in variable costs despite all household sizes favoring Pods over other formulas.

### Media Consumed

- Media Consumed heavily changes when filtering on **Age**. I will list them from greater to least media consumed. With no filters it is Print > TV > Digital Ads > Radio
- Under 35: Digital Ads -> Radio -> TV -> Print
- 35-44: Digital Ads = TV > Radio > Print
- 45-55: TV > Print > Digital Ads > Radio

- 55 and Over: Print > TV > Radio > Digital Ads

People under the age of 35 demand more blue than the other ages. The breakdown of ages and Brand Demand go from 14 million from under the age of 35 to 5 million from 55 and Over. I may focus on marketing using Digital Ads.

### Households

- A breakdown of how many people (data points) are in Household Size. This can be useful to reference when I am deciding if I should filter on Household Size.
- 1: 32.8 million
- 2: 40.9 million
- 3: 20.1 million
- 4: 17.9 million
- 5+: 12.1 million

In the **West** and **Southeast** the demand for Blue is more prevalent. For **West**, the total is 29.4 million with the **Household Size** of 2 of 9.7 million. **Southeast** has 46.7 million with **Household Size** of 2 and 1 being 15.4 million and 12.4 million respectively.

### Price Point Demand

Price point demand are prices at which demand for a given product is supposed to stay relatively high. This metric does not drastically change with any filter and it would make sense a lower price will have a high demand. That means Turbo selling at \$10 must have very good target marketing for their brand attribute.

The **current prices** as of 2018 are

- Turbo: \$10
- Fresh: \$8
- Blue: \$7
- Store: \$6

### Unit Cost of Each Company 2018

Blue: \$5.83

Turbo \$8.20

Fresh: \$5.94

Store: \$5.53

The details and calculations such as Revenue and Operating Profit etc. are in my excel sheet which I will upload.

**Operating Profit** and **Revenue** will be factored in the Decision and Strategy section based on the Demand Forecast Tool and my Income sheet.

## **My Decision and Strategy**

### **Channel Price**

The Channel Price I choose will be \$6.50

#### **Strategy**

- I have a few reasons for setting the price to \$6.50.
- Calculating PED, When Turbo and Stores increased prices, they saw a loss in demand, Although lowering the price of Blue's product will not guarantee an increase in demand, reading Porter's 5 Forces Model explains that price is a strong factor in competition.
  - There are only 3 competitors in this simulation with Blue, only Fresh's and Store's price are around \$7
  - Despite this, Fresh and Stores have a higher Brand Demand than Blue.
    - Moreover, Stores are not allocating any resources in marketing or promotions for their detergent, so they are doing less work and achieving a higher demand than Blue.

### **Formulation**

My choice is Pods

#### **Strategy**

- No matter the filter, Pods are always in demand with Powder in last place.
- Although Turbo first introduced and achieved success in introducing Pods, Blue should not be left behind.
  - Even more so since Blue's brand of detergent is seen as "unexciting."
- Blue will go with Pods despite the +15% in variable costs due to popularity.

### **Product Features and Positioning**

My choice is Odor Elimination

#### **Strategy**

- The only Region that does not have a high demand for odor elimination is Northeast,
- Turbo's attribute is a strong cleaner power and Fresh has a "fresh clean smell."
- I think Blue should also pursue an attribute for cleanliness especially since most regions demand this attribute (except Northeast). Odor elimination is more important than the other attributes.
  - Especially since Blue has a strong presence in the West and Southeast regions.

### **Trade Channel Spend**

My choice is

- Convenience: 40%
- Club: 30%
- Grocery: 20%
- Mass: 10%

## Strategy

- The lower the income, Convenience is more in demand as seen in the data.
- Since I lowered Blue's Price to \$6.50, it should make the product more affordable for people with lower income.
- Unfortunately filtering on any income, Blue is still the lowest in demand. As a result, Blue should put an emphasis into a certain trade channel.

## Media Spend

My choice is

- Print: 10%
- TV: 15%
- Radio: 15%
- Digital Ads: 60%

## Strategy

- Digital ads are more consumed by people under the age of 35 and 35-44.
- Most of the Brand Demand of Blue is from people under the age of 35 (14 million out of 32 million).
- So I have decided Blue should focus on digital ads.

## Target Market Segment for Decisions

- **Income:** \$20,000 and \$20,000-\$39,999
- No ethnicity focus
- **Household focus:** Household size of 4 and 5+
- **Region:** Southeast
- **Age:** Under 35, 35-44

## Strategy

- The most preferred channel for lower **income** people is Convenience. Since I have already chosen to focus on Convenience, I have decided to focus on people with under \$20,000 and \$20,000-\$39,999 incomes.
- Filtering on all the graphs based on **ethnicity**, there seems to be no defining changes in the graphs. So there is no ethnicity focus.
- Looking at Brand Demand, the demand of **Household sizes** of 4 and 5+ is 21.6 million out of 32 million in 2018.
  - Moreover, filtering on these and looking at Revenue, the generic store brand of detergent has higher revenue than Fresh in years 2015-2017.
- For **Region**, Southeast has the highest number of households.
  - ~46 million
  - Although Blue is also prevalent in the West and the starting demand in the West is a little higher than Southeast, there is just a larger number of people to market towards in the Southeast
    - West has Households value of 29.4million in 2018

- Looking at the historical data of Brand Demand I described earlier in the Trends section, I choose to target consumers under the **age** of 35 and 35-44

### Units to Produce

The amount of units to produce is 40 million.

### Strategy

- Blue's unit cost is more than Store and a little less than Fresh, but we are in the lowest demand.
- After playing around with the unit cost calculations and unit cost changes, with a **higher volume**, Blue will produce their Pods at a **unit cost of \$5.41** which is just below the unit cost of Store. (based on the equation total costs/volume, increasing volume will always lower unit costs)
- Looking at the **Demand Forecast Tool**, I adjusted the values of the Southeast region to be higher since my decisions focus on that region.
  - With this number of units, these values are forecasted (average values)
  - Demand: 34,329,596
  - Sales: 33,536,530
  - Revenue: \$234,755,713
  - Total Costs: \$190,326,714
  - Operating Profit: \$44,428,999
  - On my **Excel** sheet with projects with volume as 40 million and price at \$6.50, the projects revenue is 260 million and Operating Profit at \$43.5million, an increase from 37.8 million.
    - Since the average values of Revenue, Total Costs, and Operating Profit from the Demand Forecast Tool match with these corresponding values on my Excel sheet, 40 million units is a good value to produce for Year 1.
- Moreover, since I lowered the selling Price to \$6.50, Blue needs more products to sell, thus the increase of units from 32 million in 2018 to 40 million in Year 1

In conclusion, this is my template for the analysis of historical data, decision making, and strategy. The sections will be adjusted by factoring in the decisions made in Year 1 for simulation of the next year.