

CASE STUDY

Portfolio Optimization with Brand Equity

Overview

Background



- Client was planning to develop a new pricing strategy to manage consumer value as well as profitability
- Client also wanted to validate the optimal positioning of its brand vs. competition and understand the true potential of its brand to determine its ability to charge a premium

Approach



- Developed a solution combining conjoint and price modeling using sales data based pack price architecture
- Identified the preference of new brand packages and price points in a methodical way
- Optimized brand's portfolio so that client can maximize their revenue margin rather than just volumetric share
- Calculated the impact of per unit increase/decrease in the package cost on the preference shares. This helped client understand the optimum pricing curve/accepted price range
- Developed a robust Brand equity model which helped ascertain the current brand positioning and its interaction with the total sales/revenue.
- Developed simulator for determining volume share, revenue and impact of brand equity on the overall revenue share in the market

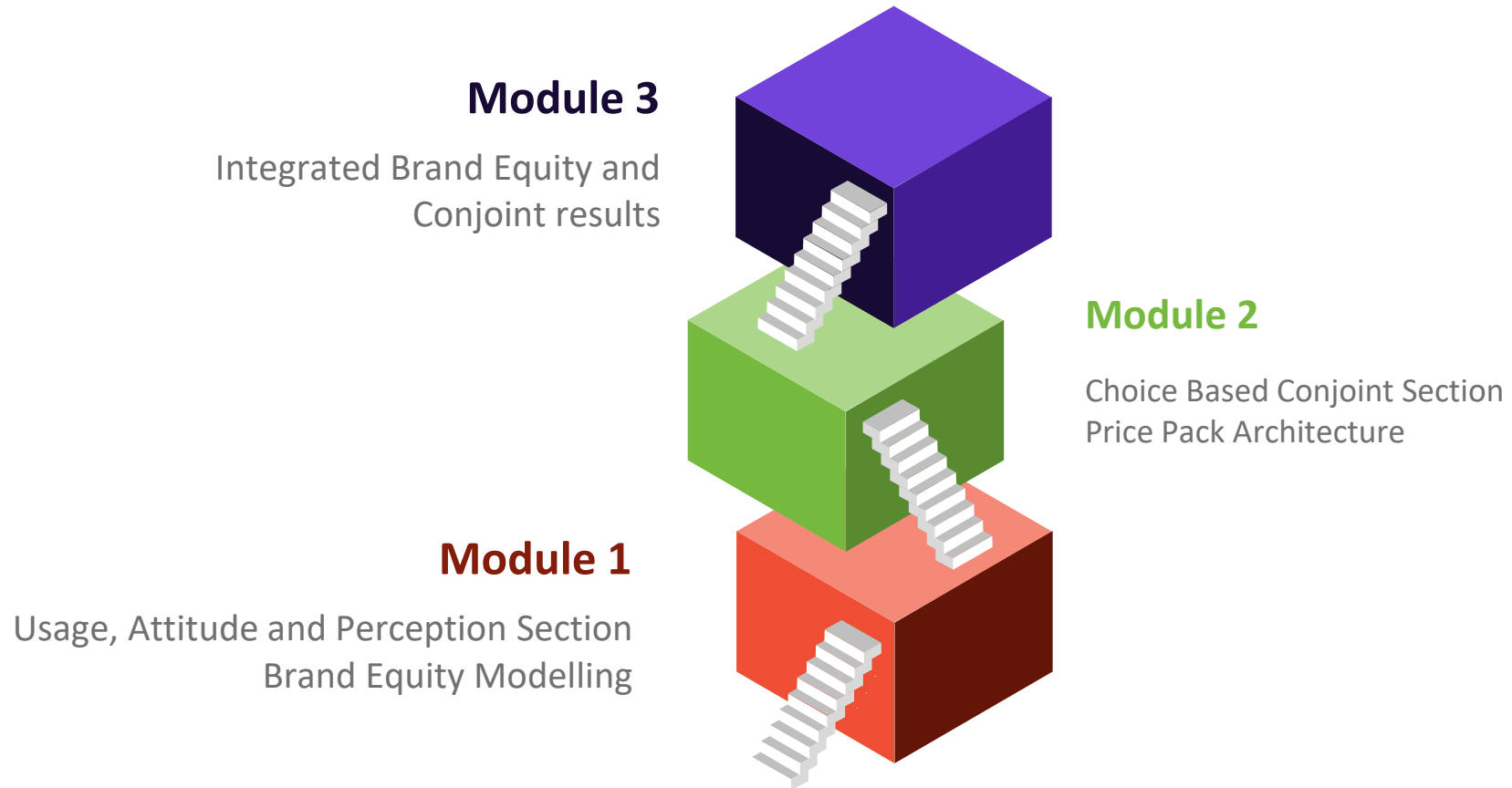
Impact



- Devised a new portfolio that helped client charge a premium for its products and boosted their brand equity to negate the impact of price increase on sales.
- It was observed that offering price incentive in larger packs helped boost sales by 1.2% and a premium on smaller packs boosted the revenues by 0.6% with key necessary measure to uplift equity

Case Study: Detailed Approach

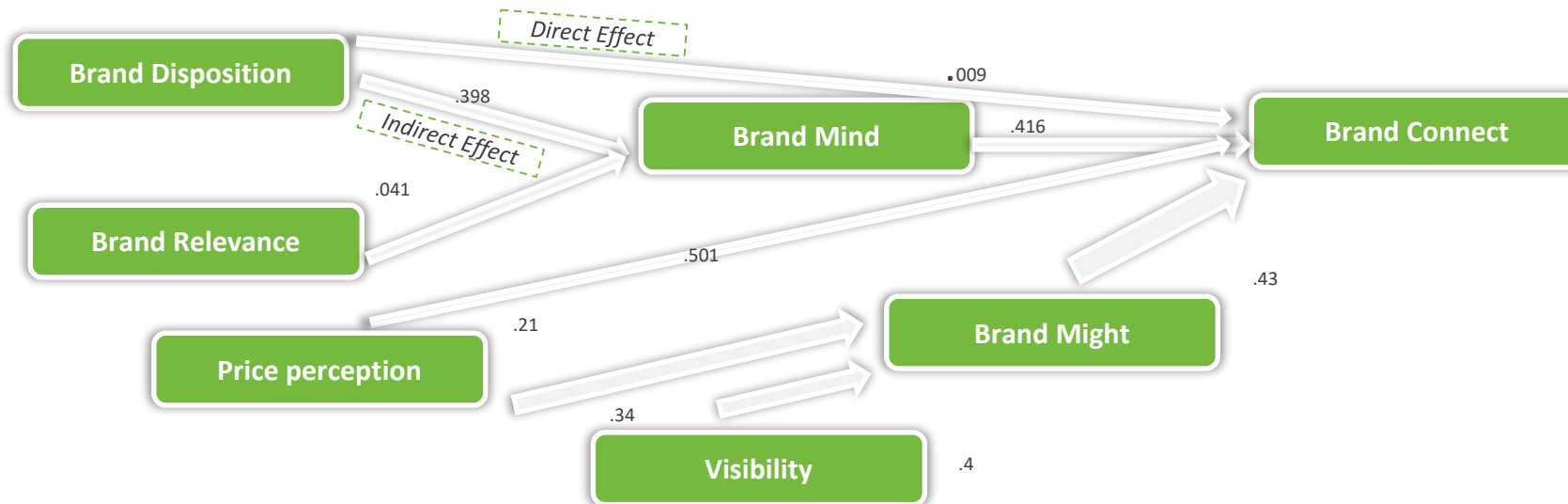
A multi modular approach
Each respondent was administered two sections of the survey



Brand Equity Detailed (1 of 2)

By using the technique of Partial Least Square (PLS) regression we arrived at a Brand Connect Score, which is a stable measure for any brand

The Direct vs. Indirect impact



PLS multivariate regression technique is a variance based Structured Equation Modeling (SEM) technique particularly suited to situations in which constructs are measured by a large number of predictors, which are often inter-related.

PLS path modeling is recommended in order to test and validate exploratory models and is a good fit for prediction-oriented research.

Brand Equity Detailed (2 of 2)

Post ascertaining the BE Score for Brand1 vis-à-vis competition, respondents were segmented basis their range of BE Score and the results were then integrated with Module 2 of the study

Brand Equity Simulator								
SAMPLE SIZE	Brand 1		Brand 1	Brand 2	Brand 3			
1500			Di Maximus	Di Chicolata	Ulter - Albeni			
TOTAL BRAND EQUITY SCORE	34.92	Base 169	39.11	Base 306	47.70	Base 530	31.14	Base 102
CONSUMER'S BRAND EQUITY	47.64	Base 115	55.79	Base 69	60.68	Base 69	46.98	Base 11
NON-CONSUMER'S BRAND EQUITY	28.80	Base 54	34.19	Base 258	45.71	Base 460	29.24	Base 91
VARIABLES USED IN THE MODEL (Excluding Imagery & Triggers)								
Base: Total Respondent								
Spontaneous Awareness	0%		3%		13%		0%	
Unaided Awareness	1%		2%		11%		0%	
Aided Awareness	19%		33%		62%		11%	
Base: Aware Respondents								
Familiarity	82%		83%		85%		100%	
Relevance (Top 2 Box)	34%		61%		70%		54%	
Consideration (Top 2 Box)	59%		44%		51%		27%	
Likelihood to Use (Top 2 Box)	56%		43%		45%		32%	

Key Business Asks and Proposed Solutions

Requirement



- Understand optimal **pack size** as per consumer preference
- Need a **pricing strategy** for existing / planned SKUs for maximizing revenue

Proposed Solution



- A robust conjoint design which allowed for testing a **wide range of SKUs and prices**

The conjoint design will have following attributes / levels –

- **Attribute:** Pack Type
- **Levels:** Single Pack, Multi Pack
 - Allows to gauge consumer preference for Single (for on the go consumption) vs Multi Pack (for storage)
- **Attribute:** Price
- **Levels:** Conditional display base on SKU base price and price variations (above / below base)
- **Example** - Base – 5%, Base, Base + 5% or Base – 10%, Base, Base + 10%
 - Allows testing wide range of prices without introducing large number of different price attributes/levels, making design efficient
 - This also, allows to interpolate prices within the range tested for identifying magic price point which can garner maximum revenue and volumes

Key Business Asks and Proposed Solutions – cont'd

Requirement



- Predict the **upsizing / downsizing** of packs with new SKU introduction / changes
- Estimate the **cannibalization** with changes in existing market scenario

Proposed Solution



- Allowed the respondents to pick multiple SKUs and multiple units in the conjoint exercise
- Optimized portfolio volume rather than SKU volume

The conjoint design will have following attributes / levels –

- An excel based simulator was created for 'What if' analysis and understand how an introduction of new SKU in portfolio impacted share of existing SKUs

A user friendly simulator was created to run the various “What-if” scenarios

Multiple Filters were used to simulate scenarios for different segments of customers

Helped identify the pack, volume and revenue captured by each SKU

The interface includes a 'Filters' section with checkboxes for Region (Sao Paulo, Porto Alegre, Recife) and Social (SEC A1/A2). A 'Most Consumed Brands' section lists Oreo, Trakinas, Bono, and Passatempo. A 'Sample Size' dropdown is set to 'n= 2000'. A 'Base Case' dropdown is also present.

Base Case	Brand 1						Brand 2	Brand 3	Brand 4	None
Pack size (Grammage)	36 gms	90gms	144 gms	36 gms	90 gms	54 gms	143 gms	140 gms	140 gms	
No. of cookies	4	10	16	4	10	6	13	14	14	
Pack type	Flow pack	Value pack	Family pack	Flow pack	Multi pack	Value pack	Family pack	Family pack	IC pack	
Price in \$	\$1.10	\$2.40	\$3.90	\$1.10	\$2.40	\$1.44	\$2.10	\$2.10	\$2.10	
Volume Share [Total Market]	6%	14%	10%	6%	22%	25%	6%	5%	6%	
Packs Share [Total Market]	19%	6%	8%	16%	3%	15%	10%	13%	10%	
Revenue Share [Total Market]	12%	9%	8%	9%	7%	37%	5%	7%	6%	

Summary tables and charts at the bottom:

Growth over previous portfolio	Volume	Packs	Revenue
Maaza	-	-	-
Slice	-	-	-
Frooti	-	-	-
Total Maaza	-11.25%	-1.33%	-1.28%

Growth over previous portfolio	Volume	Packs	Revenue
Maaza	-18.26%	-4.13%	-3.15%
Slice	-2.48%	3.62%	3.62%
Frooti	-9.71%	-0.12%	-0.68%
Total Maaza	-11.25%	-1.33%	-1.28%

Growth over previous portfolio	Volume	Packs	Revenue
Maaza	33.49%	12.62%	30.31%
Slice	-21.51%	-16.28%	-16.28%
Frooti	-13.43%	-5.27%	-3.82%
Total Maaza	1.03%	0.84%	10.96%

Volume Shares chart: Trakinas (60%), Bono (10%), Oreo (20%), Passatempo (10%).

Revenue Shares chart: Maaza (71%), Slice (23%), Frooti (3%).

With addition or change in any SKU configuration, this table showed the increase/decrease in volume, packs and revenue for the current portfolio

Chart to show the volume share of Brand1 vs. competitors

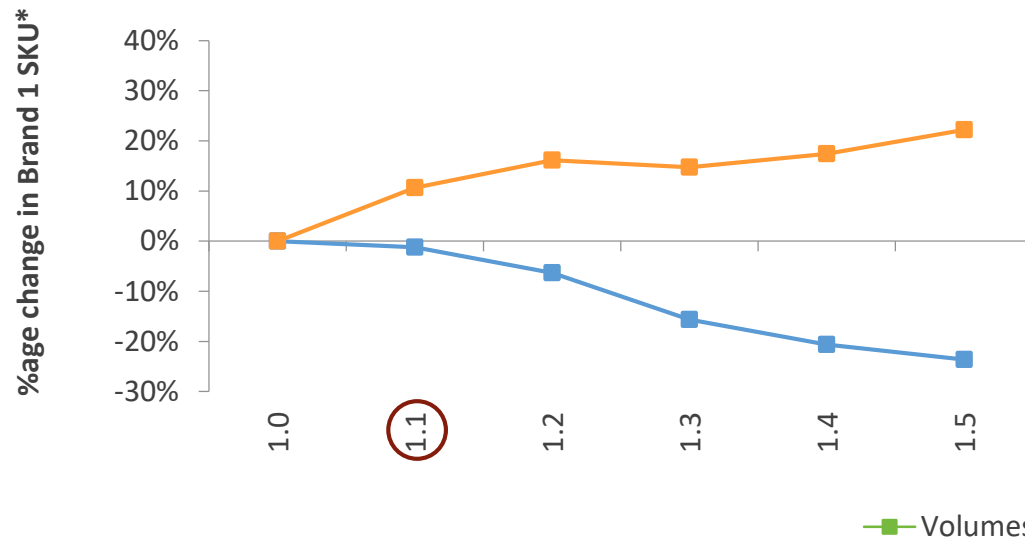
Optimized Price Points

With price increase, the overall portfolio volume decreases only slightly and revenue gain is observed

Price Elasticity of 250ml Brand1 SKU

-0.49

Price Sensitivity at SKU level



Price Sensitivity at Overall Portfolio level



- Demand curves help measure the price sensitivity of different SKUs
- In this case, we can calculate the impact of increase/decrease in the package cost on the preference shares
- This helped Client to understand the optimum pricing curve/accepted price range

Market Dynamics

'Cross Price Elasticity' indicates the percentage change in own packs when any other SKU price changes by 1%.

Cross Price Elasticity	SKU A	SKU B	SKU C	SKU D
SKU A	-250	7%	11%	20%
SKU B	17%	-325	19%	6%
SKU C	4%	8%	-225	10%
SKU D	20%	7%	23%	-1.74

If price of SKU A increases by 1%, volume loss is 250 units

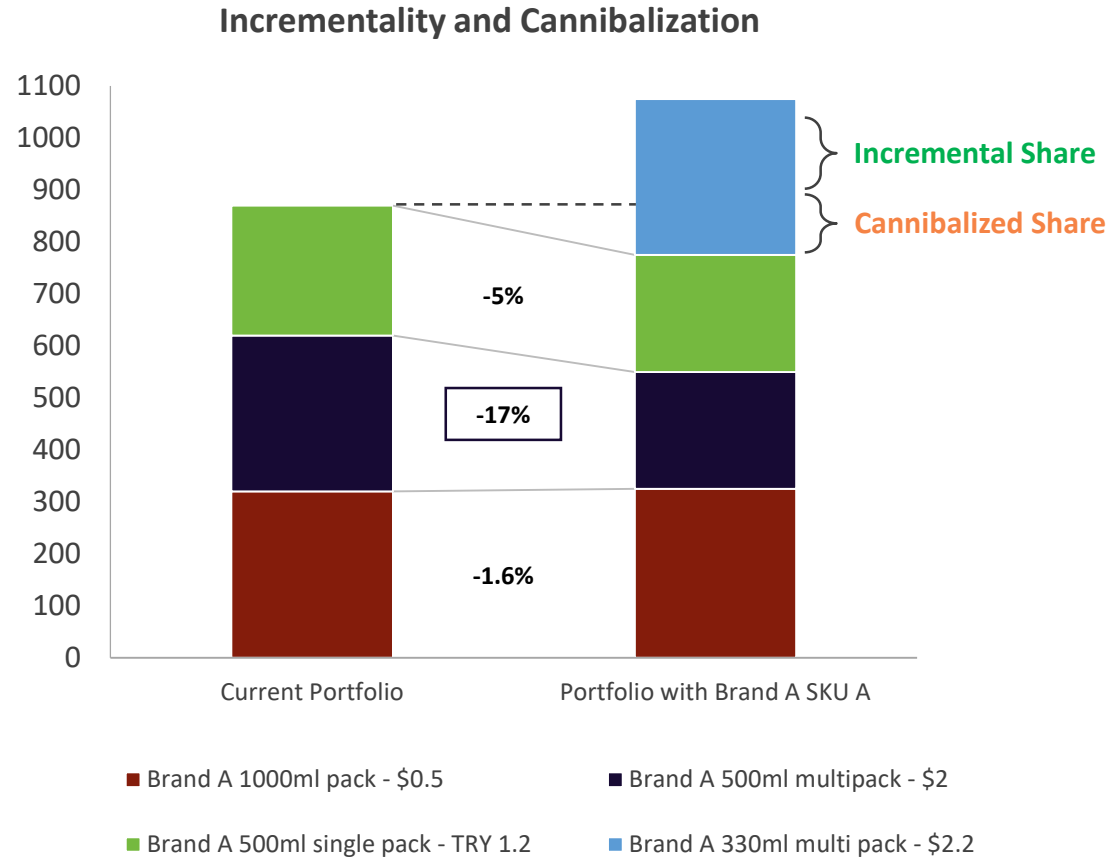
SKU D gains 20% of SKU A

The Cross-elasticity table above is an extract and has been converted to percentages against volume loss

- The numbers in the diagonal bright green cells represent the volume loss for **every 1% price increase**
Eg: if SKU A increases its price by 1%, volume loss is 250 units
- Then read across the row to see where the volume loss goes to. In the case of SKU A, 7% goes to SKU B, 11% goes to SKU C and 20% goes to SKU D
- Reading along the vertical column is a quick way to see the gains made by that SKU from its competition. Eg: SKU A gains 17% from a price increase in SKU B

Impact on Existing Portfolio

Addition of a SKU A at \$1.2 is successful in capturing incremental share, with some cannibalization



There will be marginal cannibalization mainly from the 500ml multi pack

The cannibalization leads to a slight decrease in volume share for Brand A multipack

But, this option gives higher incremental share which will be beneficial for portfolio

*All SKUs are not mentioned as it is just for illustration purpose

Key Business Asks and Proposed Solutions

Requirement



- Understand the impact of brand equity on the total shares of Brand1
- Determine the change in Brand equity required to counter the effect of price increase

Proposed Solution



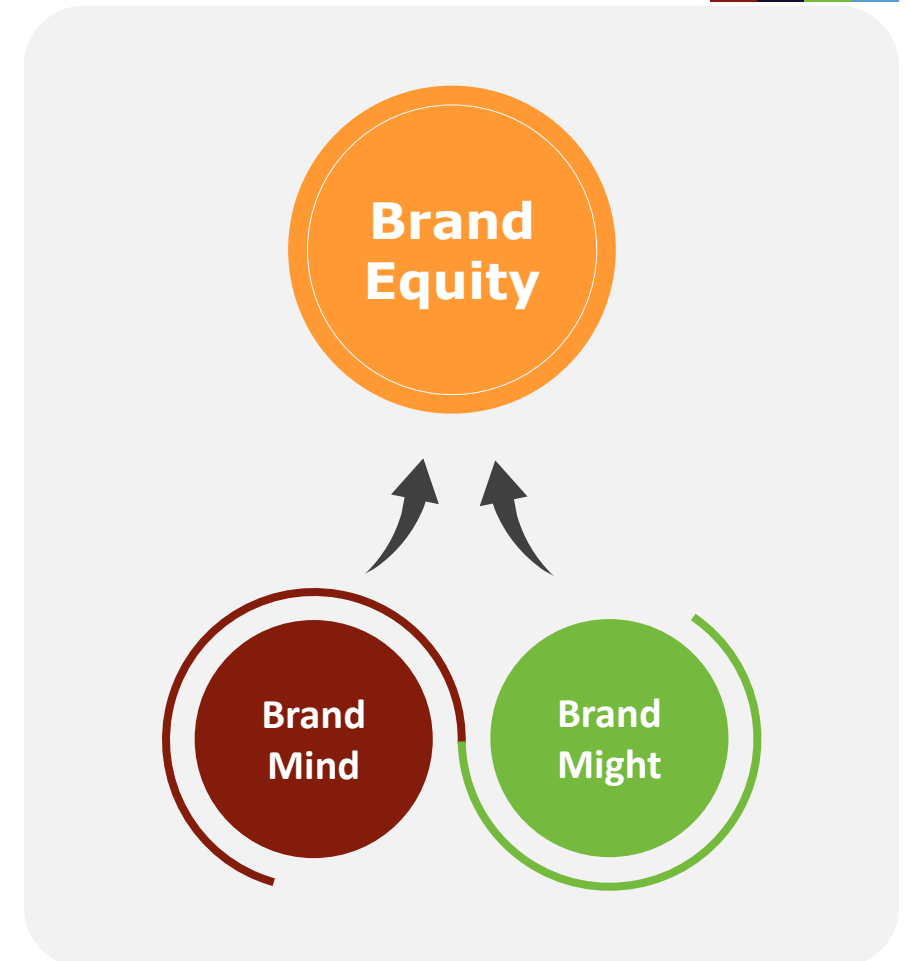
- A model to integrate the results from Module 1 and Module 2 to strike a relation between Brand Equity and Brand Market Shares

Equity Pull Assessment –

- An excel based simulator was created to understand how much brand equity affects the total market shares. It helped test various 'What if' analysis and estimate the change in Equity required to regain the loss in shares following a price increase

Latent Variables Relationships in 'Overall' Model

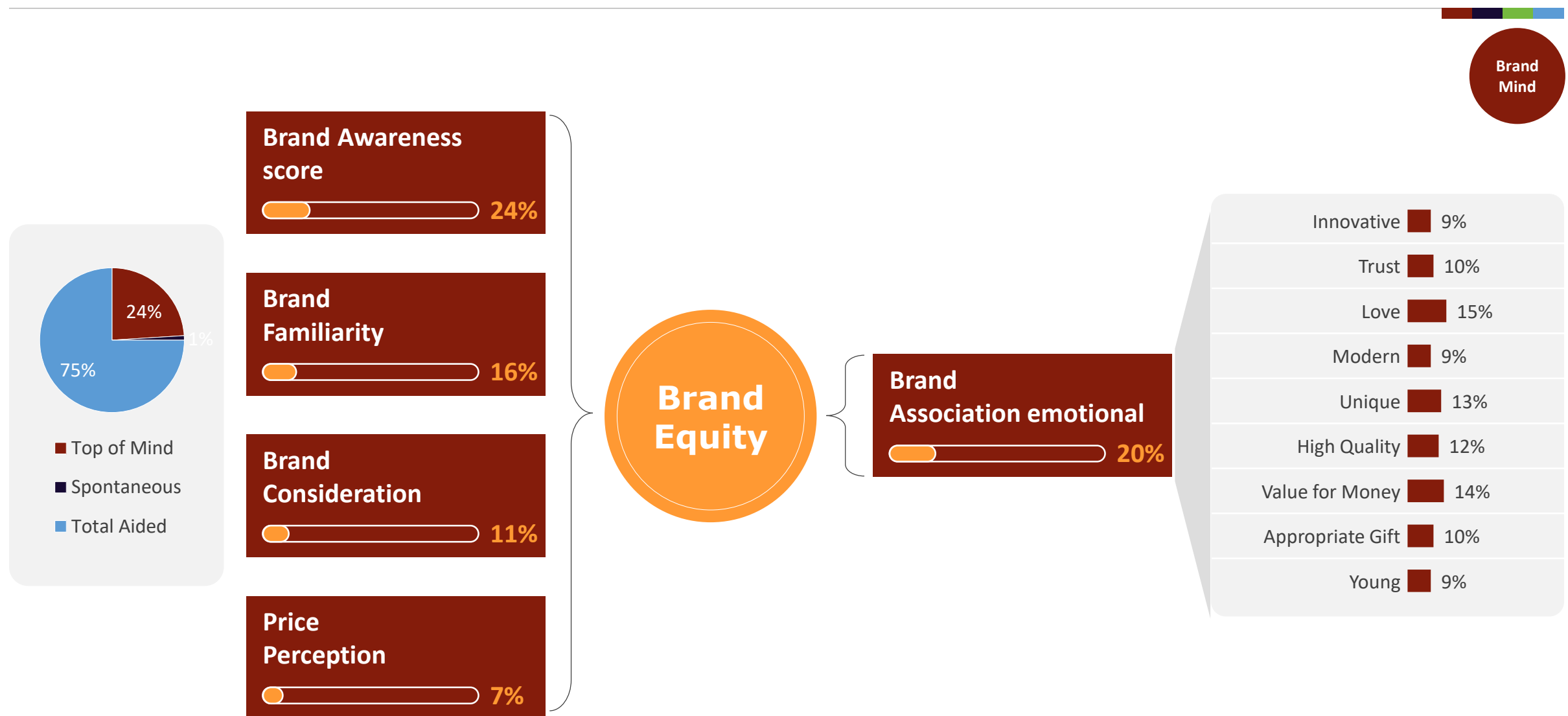
Variable Impact ↓		V1	V2	V3	V4	V5	V6	V7	V8
Awareness	V1								
Familiarity	V2	✓							
Brand Association E	V3	✓	✓						
Price Perception	V4	✗	✓	✓					
Consideration	V5	✓	✗	✓	✗				
Consumption	V6	✓	✓	✓	✗	✓			
Brand Association F	V7	✗	✓	✓	✓	✓	✓		
Affinity	V8	✗	✗	✓	✓	✓	✓	✓	



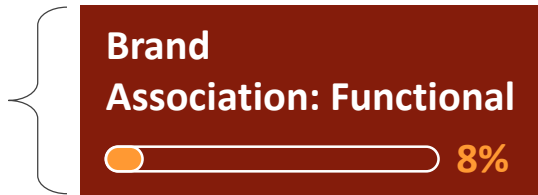
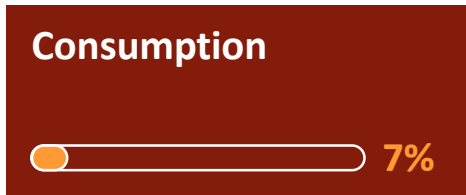
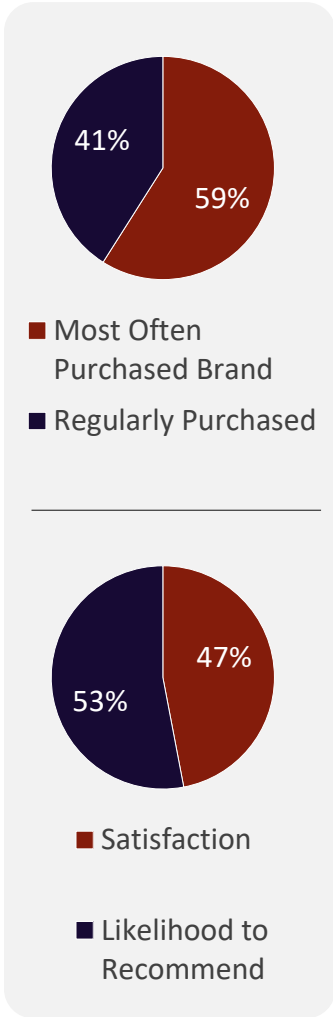
✓ Impact ✗ No Impact

Path Matrix

4/5th of the overall Brand Equity constitute Brand Mind with a high impact of Awareness. Price perception has only a 7% weightage to overall equity.



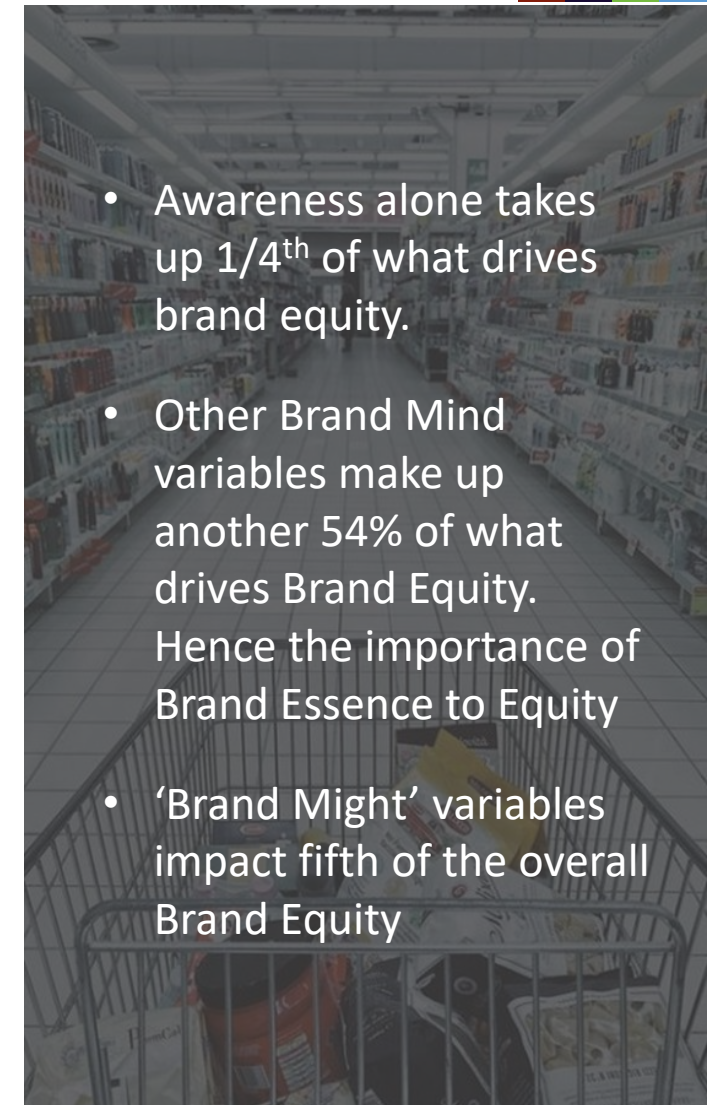
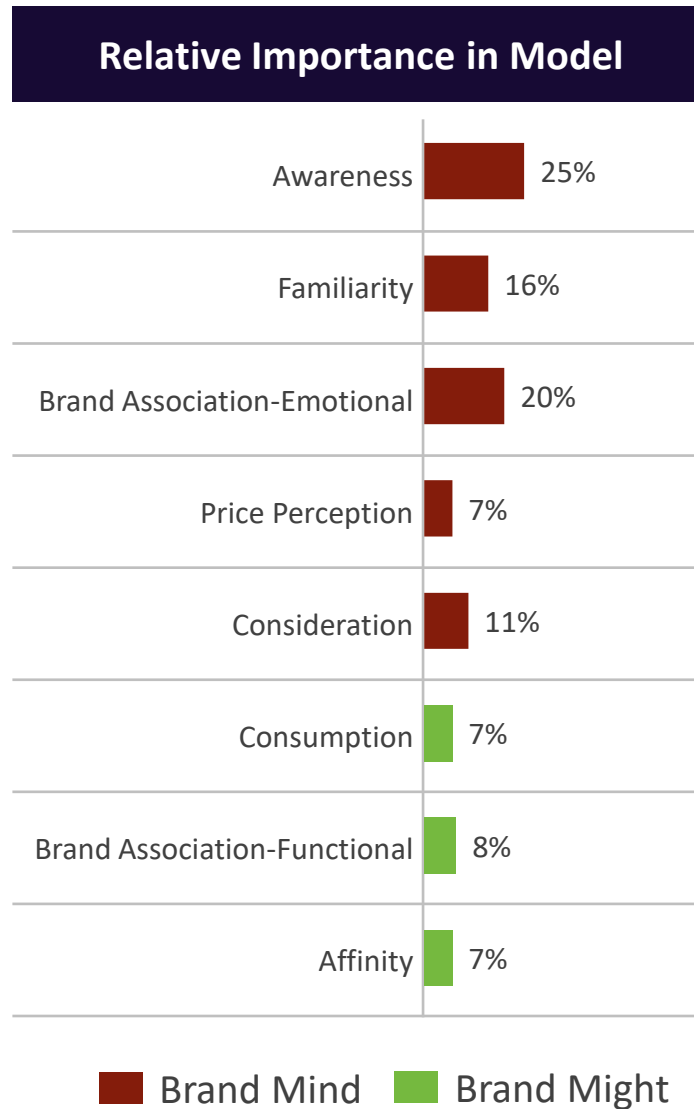
and Brand Might explains the remaining Brand Equity wherein Consumption, Affinity and Functional Associations have similar contributions.



Taste	16%
Ingredients	14%
Availability	8%
Satisfying Hunger	10%
No Artificial Colors	6%
Relieving Stress	12%
Wide Variety	10%
Packaging	10%
Balanced Products	5%
Good for Sharing	10%

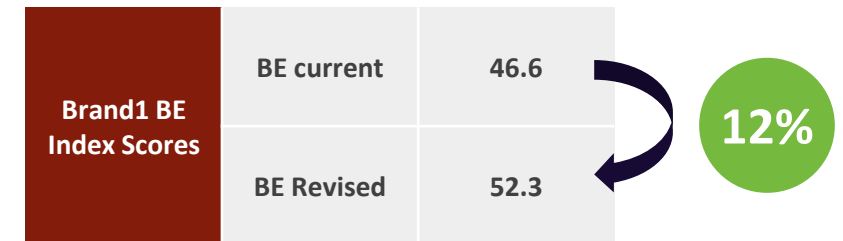
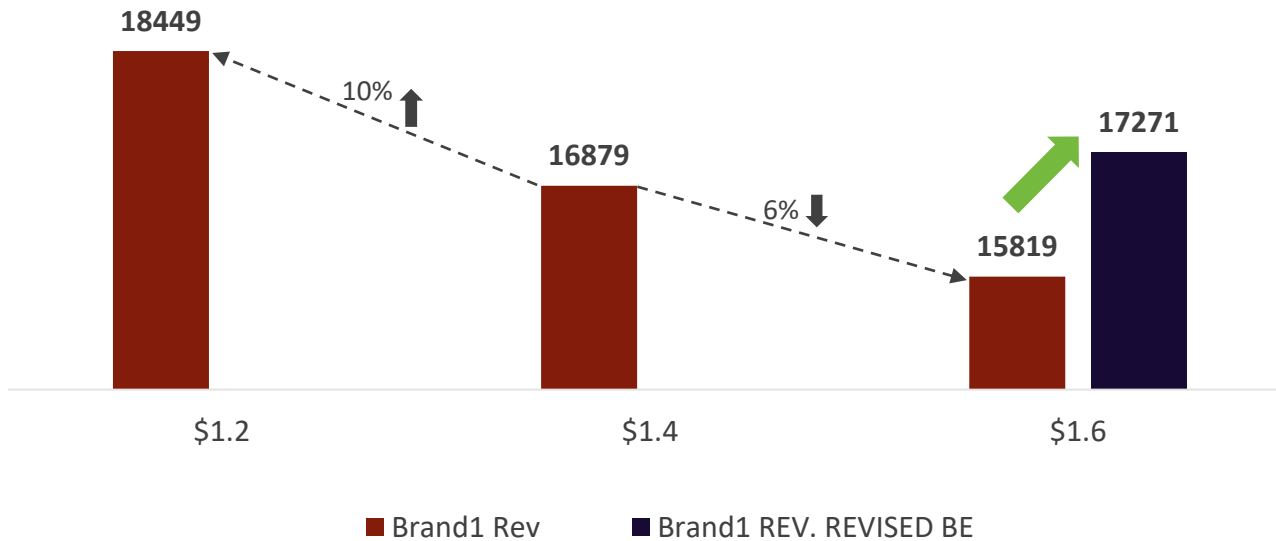
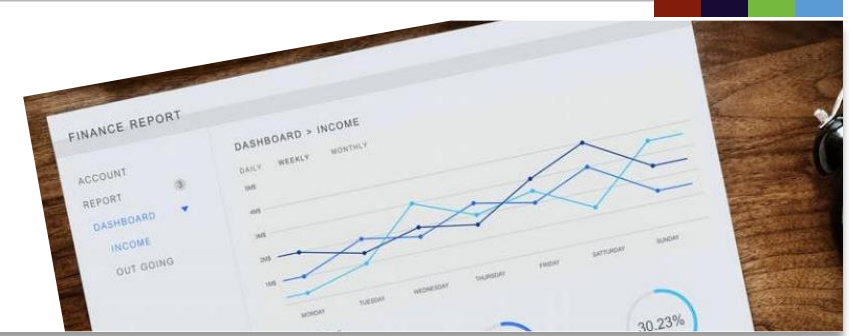
Output of Equity Model

Brand	Brand Equity (Indexed)
Brand A	70.87
Brand B	58.77
Brand C	54.8
Brand D	46.58
Brand E	34.06
Brand F	27.26



What Equity does Brand1 demands for a price increase of \$ x

- Current Price Index (PI) of 165, Brand1 draws a revenue of \$ 3mn
- Increasing PI to 175, results in the overall revenue drop of 6%
- This can be compensated by increasing the Brand Equity spends by 12.21%
- Also, decreasing the PI to 152, will result in a 10% increase in the revenue



THANK
YOU