# WAHACA PRICE PROMOTION

Natalie Kvochak,
Maryclare Leonard,
Sean O'Grady

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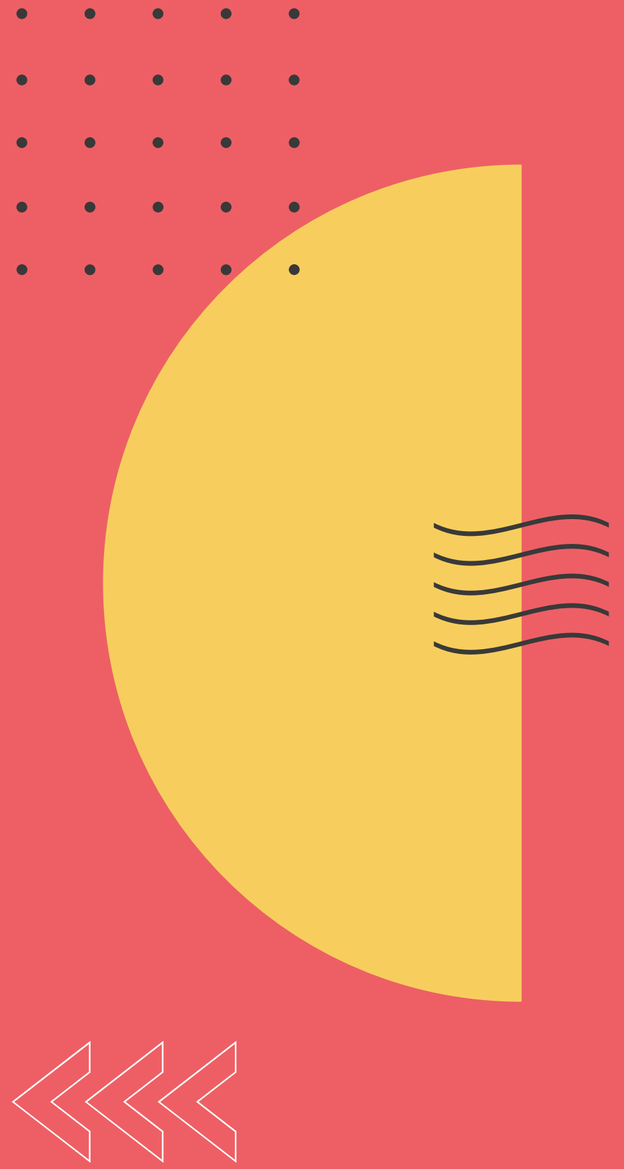
01

# Problem Statement



# Background

Number of Tesco Stores: 20
Wahaca Products: salsa, tortillas, marinade & soft tacos
Two sizes: large (300 grams) and small (200 grams)

# Test Results

Test ran for 10 weeks in all 20 stores; small size salsa only
Zone 1 pricing: £1.59; Zone 2 pricing: £1.79
Price promotions: £1.19 for 4 weeks and £0.99 for 1 week
Wahaca was a successful product line and should move into launch phase

# Next Steps

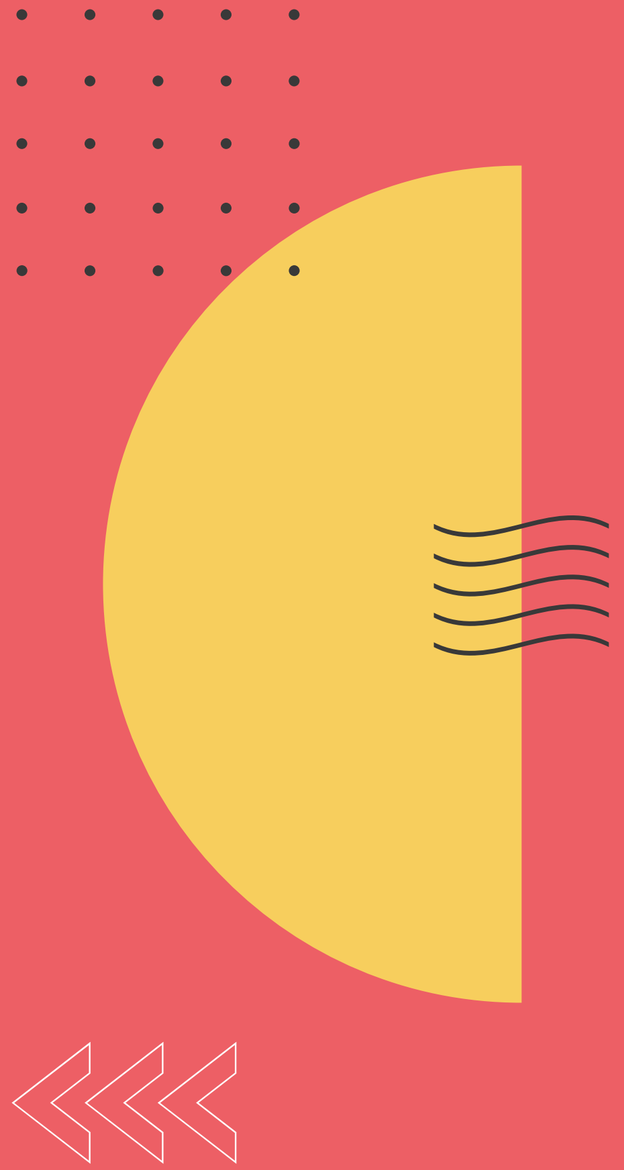
Number of Stores: 20
Length of Time: 10 weeks

Desired Result: Price Promotion Strategy for Small Size Wahaca salsas

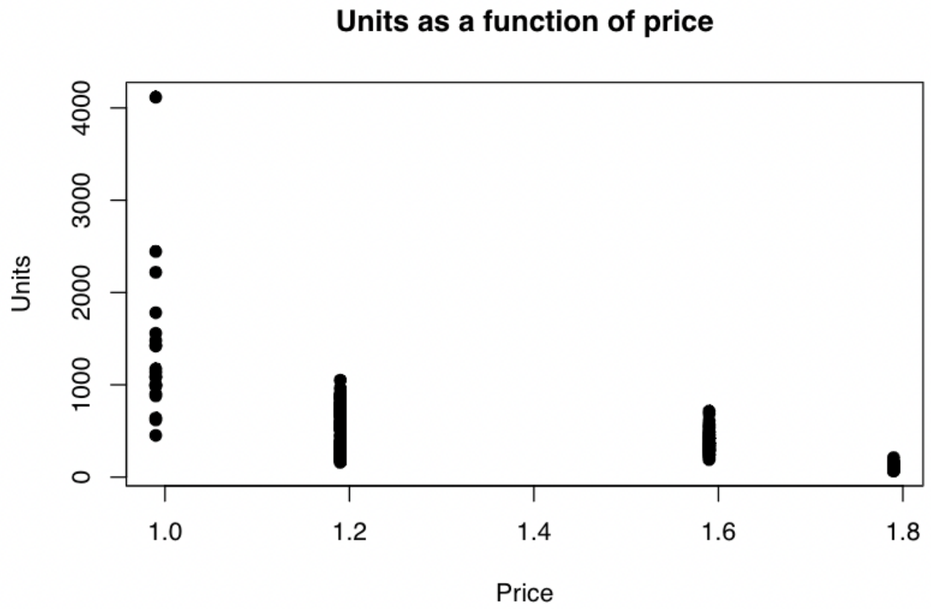
Question: Repeat the pricing from the test or do something different?

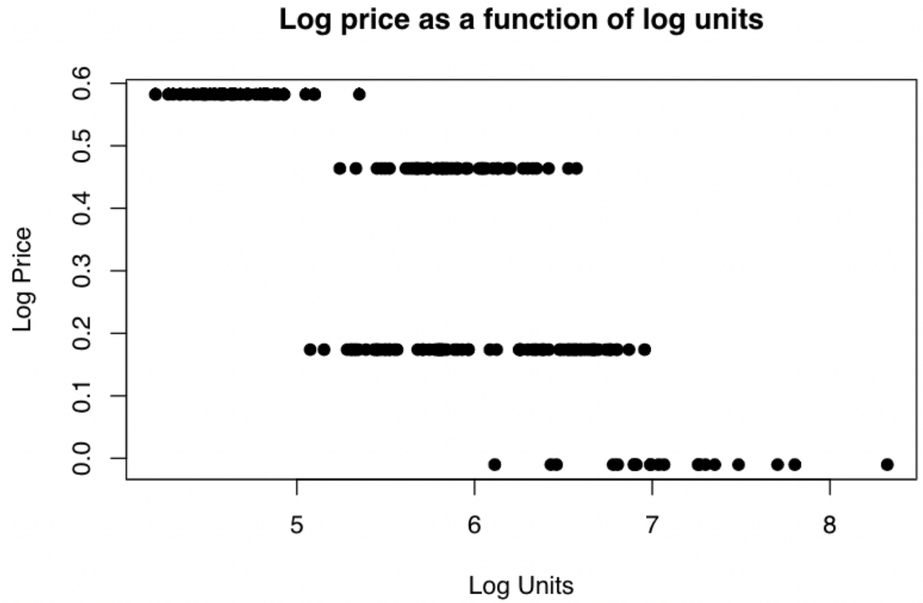
02

# Empirical Strategy



# DATA EXPLORATION




Visualize the distribution of the Number of Units sold at each price point

Visualize the Regression we run in the next step

# Correlation Matrix

```
            price   pop units holiday
price       1.00 -0.17 -0.61   -0.50
pop        -0.17  1.00  0.45    0.00
units      -0.61  0.45  1.00    0.67
holiday    -0.50  0.00  0.67    1.00
Sample Size
[1] 200
```

**Positive Correlation between units & population.**

**Stronger Positive Correlation between units & holiday.**

# Regression for Zone 1

```
Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept)  6.94964    0.07245  95.926  < 2e-16 ***
ln_p        -2.27334    0.19871 -11.440  < 2e-16 ***
Dholiday1    0.47892    0.11352   4.219 5.53e-05 ***
---
```

**Regression indicates that the price elasticity for Zone 1 is -2.273.**

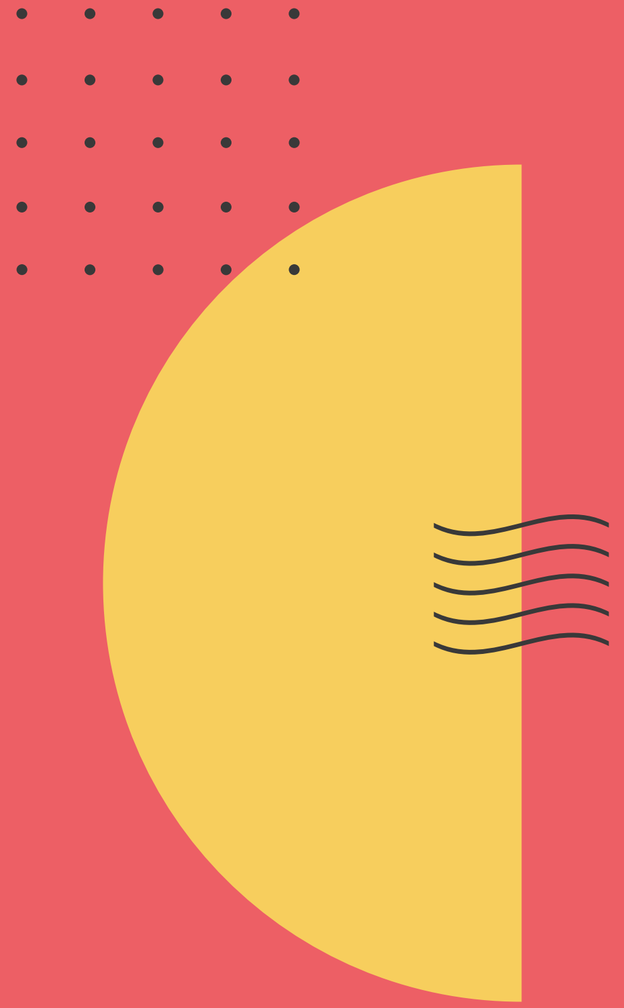
# Regression for Zone 2

```
Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept)  6.03401    0.06075  99.325  < 2e-16 ***
ln_p        -2.36523    0.13525 -17.488  < 2e-16 ***
Dholiday1    0.67766    0.10303   6.577 2.43e-09 ***
---
```

**Regression indicates that the price elasticity for Zone 2 is -2.365.**

03

# Key Results



# Wahaca Profit
## Zone 1

# £1.19 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.19 |
| Retail % Margin | 37% | 34% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 3799 | 7335 |
| Manufacturer Gross Profit | £ 1,520 | £ 1,394 |
| Retailer Gross Profit | £ 2,242 | £ 2,934 |
| Trade Budget | | £ 1,540 |
| | | |
| * Elasticity | | -2.27 |

£126 loss in profit

# Wahaca Profit
## Zone 1

# £1.09 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.09 |
| Retail % Margin | 37% | 28% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 3799 | 8952 |
| Manufacturer Gross Profit | £ 1,520 | £ 1,701 |
| Retailer Gross Profit | £ 2,242 | £ 2,686 |
| Trade Budget | | £ 1,880 |
| | | |
| * Elasticity | | -2.27 |

£181 increase in profit

# Tesco Profit

## Zone 1

# £1.19 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.19 |
| Retail % Margin | 37% | 34% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 3799 | 7335 |
| Manufacturer Gross Profit | £ 1,520 | £ 1,394 |
| Retailer Gross Profit | £ 2,242 | £ 2,934 |
| Trade Budget | | £ 1,540 |
| | | |
| * Elasticity | | -2.27 |

£692 increase in profit

# Tesco Profit

## Zone 1

# £1.09 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.09 |
| Retail % Margin | 37% | 28% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 3799 | 8952 |
| Manufacturer Gross Profit | £ 1,520 | £ 1,701 |
| Retailer Gross Profit | £ 2,242 | £ 2,686 |
| Trade Budget | | £ 1,880 |
| | | |
| * Elasticity | | -2.27 |

£444 increase in profit

# Wahaca Profit
## Zone 2

# £1.19 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.79 | 1.19 |
| Retail % Margin | 44% | 34% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 1088 | 2850 |
| Manufacturer Gross Profit | £ 435 | £ 542 |
| Retailer Gross Profit | £ 859 | £ 1,140 |
| Trade Budget | | £ 599 |
| | | |
| * Elasticity | | -2.36 |

£107 increase in profit

# Wahaca Profit
## Zone 2

# £1.09 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.79 | 1.09 |
| Retail % Margin | 44% | 28% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 1088 | 3507 |
| Manufacturer Gross Profit | £ 435 | £ 666 |
| Retailer Gross Profit | £ 859 | £ 1,052 |
| Trade Budget | | £ 736 |
| | | |
| * Elasticity | | -2.36 |

£231 increase in profit

# Tesaco Profit

## Zone 2

# £1.19 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.79 | 1.19 |
| Retail % Margin | 44% | 34% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 1088 | 2850 |
| Manufacturer Gross Profit | £ 435 | £ 542 |
| Retailer Gross Profit | £ 859 | £ 1,140 |
| Trade Budget | | £ 599 |
| | | |
| * Elasticity | | -2.36 |

£281 increase in profit

# Tesaco Profit

## Zone 2

# £1.09 PRICE PROMOTION

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.79 | 1.09 |
| Retail % Margin | 44% | 28% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 1088 | 3507 |
| Manufacturer Gross Profit | £ 435 | £ 666 |
| Retailer Gross Profit | £ 859 | £ 1,052 |
| Trade Budget | | £ 736 |
| | | |
| * Elasticity | | -2.36 |

£193 increase in profit

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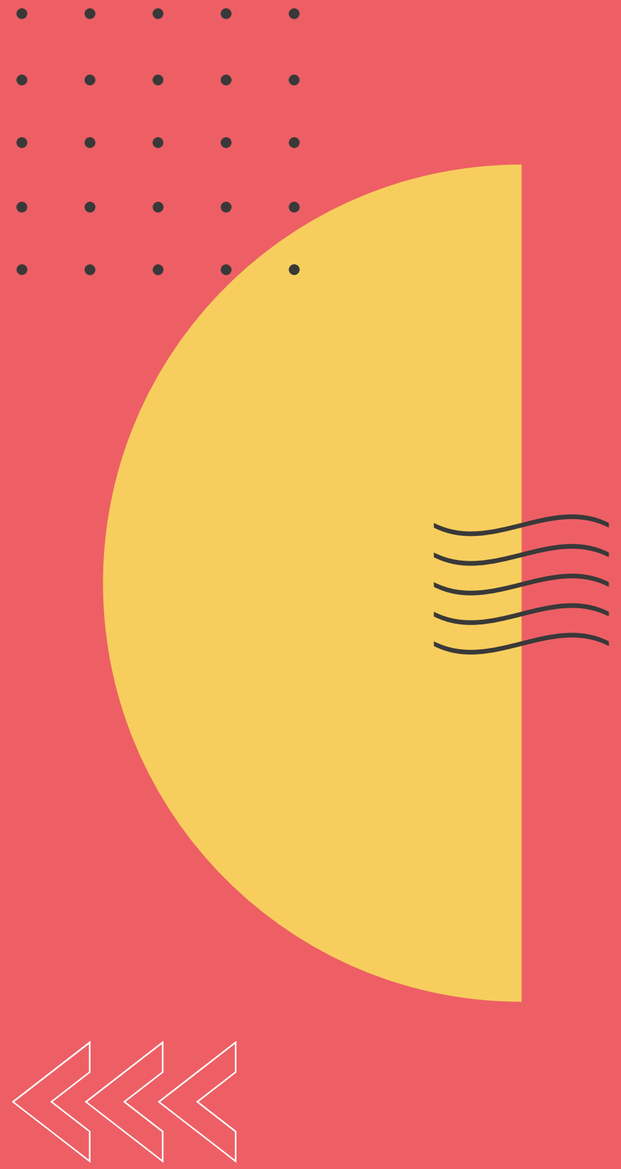
# Managerial Discussions/ Suggestions



# Promotion Strategy

- Promotion price of £1.09 rather than £1.19
  - Higher combined gross margin
- With current £0.21 scanback , Tesco is worse off in scenario 2
- Changing scanback price to £0.24 makes £1.09 more profitable than a regular week for Wahaca and more profitable than scenario 1 for Tesco
- Lower price would drive volume
  - Increased market penetration for new product

| | Wahaca | Tesco | Total |
|---|---|---|---|
| Scenario 1 | £1,935 | £4,074 | £6,009 |
| Scenario 2 | £2,367 | £3,737 | £6,104 |
| New Scanback | £1,993 | £4,111 | £6,104 |

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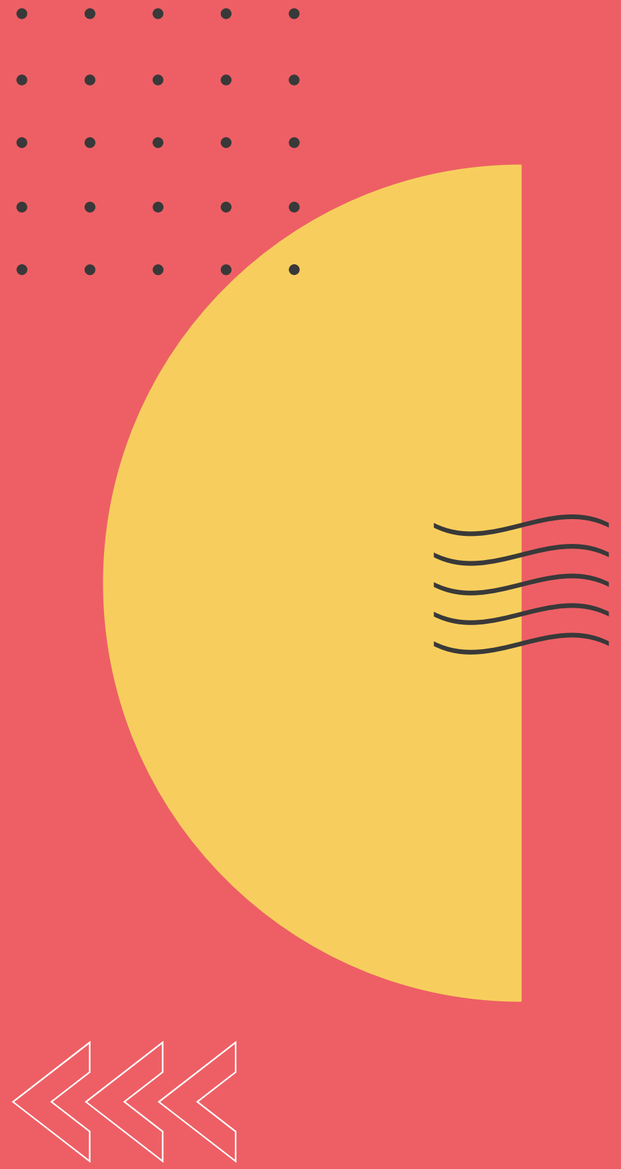
# Discussion on Limitations



# Limitations

- Time period of entire test is too short
- Only having one week of data for 0.99 is not sufficient

# Concerns

- Higher elasticity in Zone 2, but a higher regular price in Zone 2

# Thank You

# Appendix

# Zone 1

# £1.09 PRICE PROMOTION

## WITH PRICE ELASTICITY -2.27

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.09 |
| Retail % Margin | 37% | 28% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 3799 | 8952 |
| Manufacturer Gross Profit | £ 1,520 | £ 1,701 |
| Retailer Gross Profit | £ 2,242 | £ 2,686 |
| Trade Budget | | £ 1,880 |
| | | |
| * Elasticity | | -2.27 |

# Zone 1

# £1.19 PRICE PROMOTION

## WITH PRICE ELASTICITY -2.27

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.19 |
| Retail % Margin | 37% | 34% |
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| | | |
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| Manufacturer Gross Profit | £ 1,520 | £ 1,394 |
| Retailer Gross Profit | £ 2,242 | £ 2,934 |
| Trade Budget | | £ 1,540 |
| | | |
| * Elasticity | | -2.27 |

# Zone 2

# £1.19 PRICE PROMOTION

WITH PRICE ELASTICITY -2.36

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.79 | 1.19 |
| Retail % Margin | 44% | 34% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 1088 | 2850 |
| Manufacturer Gross Profit | £ 435 | £ 542 |
| Retailer Gross Profit | £ 859 | £ 1,140 |
| Trade Budget | | £ 599 |
| | | |
| * Elasticity | | -2.36 |

# Zone 2

# £1.09 PRICE PROMOTION

WITH PRICE ELASTICITY -2.36

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.79 | 1.09 |
| Retail % Margin | 44% | 28% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 1088 | 3507 |
| Manufacturer Gross Profit | £ 435 | £ 666 |
| Retailer Gross Profit | £ 859 | £ 1,052 |
| Trade Budget | | £ 736 |
| | | |
| * Elasticity | | -2.36 |

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.19 |
| Retail % Margin | 37% | 34% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 3799 | 7335 |
| Manufacturer Gross Profit | £1,519.68 | £1,393.56 |
| Retailer Gross Profit | £2,241.53 | £2,933.81 |
| Trade Budget | | £1,540.25 |
| | | |
| * Elasticity | | -2.27 |
| Population Coefficient | 0.2224 | |
| EXP(population coefficient) | 1.249070906 | |
| | 1.338630651 | |
| Units per Week for Population of 75,000 | 5086 | 9818 |
| Number of Weeks | 12 | 14 |
| Total Units for Populaiton of 75,000 | 61029 | 137455 |
| Total Units Sold over 26 Weeks | | 198484 |

1. Calculate e^population coefficient from the regression of population
2. Multiply that by 7.5 / 6.99822
   a. (the theoretical population)/(the average populations for zone 1)
3. The result is multiplied by the average units per zone per week
   a. (3,799 for base and 7,335 for promotion at £1.19)
4. The result is the units per week for population of 75,000
   a. The Base and Promotion results are multiplied by 12 and 14 respectively to get the sum of total units over the 26 weeks.

# ZONE 1 @ £1.19 PROMOTION
## THEORETICAL POPULATION OF 75,000

| | Base | Promotion |
|---|---|---|
| Manufacturing Cost | 0.6 | 0.6 |
| Whoelsale Price | 1 | 0.79 |
| Retail Price | 1.59 | 1.09 |
| Retail % Margin | 37% | 28% |
| Manufacturer % Margin | 40% | 24% |
| | | |
| Average Units per Zone per Week | 3799 | 8952 |
| Manufacturer Gross Profit | £1,519.68 | £1,700.82 |
| Retailer Gross Profit | £2,241.53 | £2,685.51 |
| Trade Budget | | £1,879.86 |
| | | |
| * Elasticity | | -2.27 |
| Population Coefficient | 0.2224 | |
| EXP(population coefficient) | 1.249070906 | |
| | 1.338630651 | |
| Units per Week for Population of 75,000 | 5086 | 11983 |
| Number of Weeks | 12 | 14 |
| Total Units for Populaiton of 75,000 | 61029 | 167762 |
| Total Units Sold over 26 Weeks | | 228791 |

1. Calculate e^population coefficient from the regression of population
2. Multiply that by 7.5 / 6.99822
   a. (the theoretical population)/(the average populations for zone 1)
3. The result is multiplied by the average units per zone per week
   a. (3,799 for base and 8,952 for promotion at £1.09)
4. The result is the units per week for population of 75,000
   a. The Base and Promotion results are multiplied by 12 and 14 respectively to get the sum of total units over the 26 weeks.

# ZONE 1 @ £1.09 PROMOTION
## THEORETICAL POPULATION OF 75,000