**Group2 Project Report(Maxwell House Ground Coffee)**

# Introduction

The report lays out the analysis performed on the scanner data and panel data focusing on the brand of Maxwell House ground coffee. All the analysis results are focused on Maxwell House ground coffee.

# Descriptive Analysis

The top 6 brands by dollar sales (dollars/units) are:

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A picture containing table, drawing

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Our brand is competing closely with Starbucks in terms of dollar sales (calculated by Dollar Sales = Dollars/Units). The market share looks almost equal for Starbucks and Maxwell house. Let us check if that is the case by carrying out t-test between mean dollar sales of Starbucks and Maxwell House. The parent company of both brands is KRAFT FOODS INC.

# T-test of mean dollar sales between Maxwell House and Starbucks

**Null hypothesis:** Mean sales of Maxwell house = Mean sales of Starbucks

**Alternate hypothesis:** Mean sales of Maxwell house != Mean sales of Starbucks

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From the t-test, we reject null hypothesis in favor of alternate hypothesis and conclude that the mean dollar sales of Maxwell house is significantly different from mean dollar sales of Starbucks. In fact, the mean sales of Maxwell house in less than that of Starbucks.

# Top 5 brands within KRAFT FOODS INC.

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# Top 5 brands within KRAFT FOODS INC. in Ground Coffee Category

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Overall, Starbucks leads by dollar sales, but in Ground coffee category, Maxwell House leads by Dollar sales.

# Top 5 regions where sales of our brand is highest

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# Top 5 stores where sales of our brand is highest

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# Visualization of number of units sold per week for Maxwell house Ground Coffee

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# Weekly price per ounce of Maxwell House Ground Coffee

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# Correlation between Units sold and average price per ounce

There is a negative correlation (-70.83) between Units sold and average price per ounce.

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As expected, the number of units sold is higher when average price per ounce is lower.

# ANOVA to test of categorical features such as Flavor, Packaging and Brewing method affect dollar sales

## Flavor

Null hypothesis: Dollar sales of all flavors is equal

Alternate hypothesis: Dollar sales of all flavors is not equal

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From ANOVA, we observe that dollar sales of Regular flavor coffee is significantly different from other flavors

## Packaging

Null hypothesis: Dollar sales of all type of packaging is equal

Alternate hypothesis: Dollar sales of all type of packaging is not equal

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From ANOVA, we observe that dollar sales of Canned packaging in significantly different from other flavors.

## Brewing Method

Null hypothesis: Dollar sales of all type of brewed coffee is equal

Alternate hypothesis: Dollar sales of all type of brewed coffee is not equal

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From ANOVA, we conclude that dollar sales of all-purpose coffee is higher than other brewing methods.