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Individual Analysis

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Subject: ALY6070 NUID: 002982645

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Introduction

This was group assignment and we took data from Kaggle and it is data of Coffee chain. For the analysis and dashboard, we decided to separate by region of USA. For this, it includes Texas, Louisiana, Oklahoma and New Mexico. Except Texas, rest are minor markets according to data. Dataset has almost 5000 samples which is enough to identify the trends for benefits of company. There are Budget Variables, variable which contains performance, types of market, product, coffee. This dashboard is capable of identify key things that can help to understand the business and its performance. Data refers to Dec 2009 to Dec 2011.

This data is looked like belongs to Starbuck based on our research nothing else provided with dataset description.
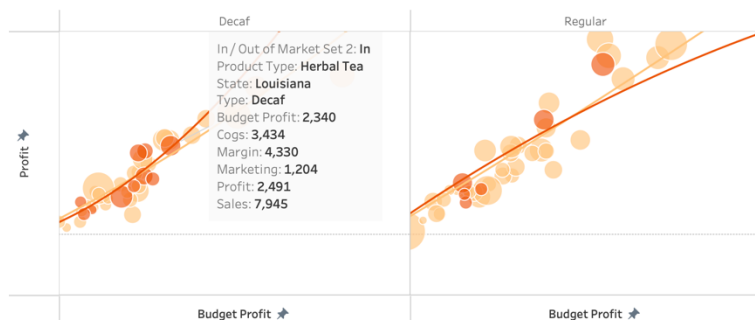
Who will receive all of this information?

I believe this dashboard is just for southern USA compared to overall USA regions. Management of this coffee distributor will make all of analysis to judge what is happening and what should our future steps.
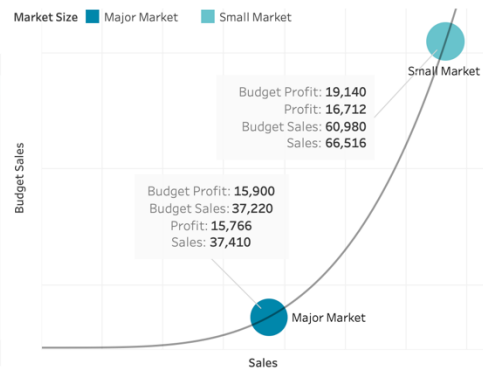
Performance Dashboard of South USA

Performance Analysis of South USA

Profit vs Budget Profit

In / Out of Market Set 2: **In**
Product Type: **Herbal Tea**
State: **Louisiana**
Type: **Decaf**
Budget Profit: **2,340**
Cogs: **3,434**
Margin: **4,330**
Marketing: **1,204**
Profit: **2,491**
Sales: **7,945**

This chats represents **the profit vs it's budget of south USA** comparing to other states of USA. It includes **Texas, Oklahoma, New Maxico and Louisiana**. Lines represents **trends** in **profit of two distribution of coffees**.
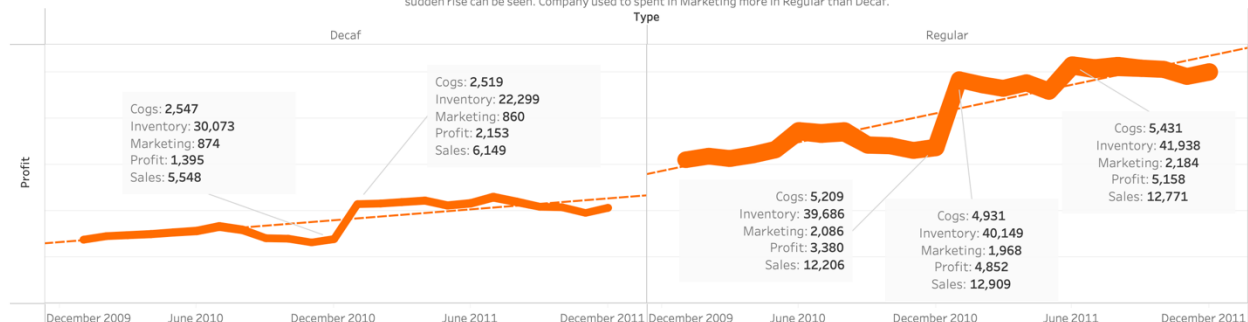
Performance of South USA Market

Market Size ■ Major Market ■ Small Market

Budget Profit: **19,140**
Profit: **16,712**
Budget Sales: **60,980**
Sales: **66,516**

Budget Profit: **15,900**
Budget Sales: **37,220**
Profit: **15,766**
Sales: **37,410**

This illustration represents the market divided into two type. Surprising fact is that **Small market has better sales number** but **almost same profit as Major market**.

Profit, Type, Sales & Inventory Of Products

This illustration shows that sales of Coffee types' over the period. It's seems that sales do have an impact on profit which is obvious. Though, there is a sudden rise can be seen. Company used to spent in Marketing more in Regular than Decaf.

Decaf

Cogs: **2,547**
Inventory: **30,073**
Marketing: **874**
Profit: **1,395**
Sales: **5,548**

Cogs: **2,519**
Inventory: **22,299**
Marketing: **860**
Profit: **2,153**
Sales: **6,149**

Regular

Cogs: **5,209**
Inventory: **39,686**
Marketing: **2,086**
Profit: **3,380**
Sales: **12,206**

Cogs: **4,931**
Inventory: **40,149**
Marketing: **1,968**
Profit: **4,852**
Sales: **12,909**

Cogs: **5,431**
Inventory: **41,938**
Marketing: **2,184**
Profit: **5,158**
Sales: **12,771**

1. What is illustrated in Dashboard?

Focusing on the first plot, **Dark orange** one is **the states of south region of USA** which are mentioned earlier and other light one are other state. Size of the scatters are sum of sales so that bigger have a greater number of sales. There are highest selling top beverages which is **Decaf** and **Regular**.

Second plot refers to markets based on sales and from dataset, there are two, **Major and Minor**.

Last demonstrates profit all over time from the dataset. **Slight inclinatio**n can be seen throughout time but there is a period from Dec 2010 to Jan 2011 where **a sudden rise** in sales exists. **Thickness of lines** suggests marketing spent on each type.

2. Budget Profit vs The Actual Performance

As we have profit and budget profit, Upper triangle shows trend to profit exceeds budget (Which is beneficial for company) and Lower triangle shows lac of profit in performance.

For the Regular, profits are less than budget. From the dashboard, we can see that company used to invest more in regular in terms of marketing, inventory, cogs, etc. Still profits are less.

Unfortunately, Dataset is not descriptive, I've found by researching that due to affairs of countries like Brazil, Vietnam, Columbia, UK and USA in Nov 2010, Coffee prices were way to fluctuated for bags of coffee beans. On Dec 2010, Starbuck's CEO announces 50% rise in profits and it actually did. Because of Columbia was providing coffee at some reasonable price. However, Trend line measures overall performance which leads it toward budget.

3. Market Analysis

Company has separated states into major and minor market according to sales. Except Texas, others have cumulative numbers.

Performance of Texas almost meets expected budget profit and sales of company. However, Minor market is not performing well for profit but for Sales, it have exceeded the budget by half million. I believe cost of inventory holding, cogs which is cost of manufacturing including imports.

For Major market, profit needs to increase because sales meeting budget which means difference in profit and budget profit is loss for the company. For regular, company actually running in less profit since 2009.

Conclusion

As I mentioned earlier, data is not so descriptive as variables are not answering but from the research found that something were running between countries.

To increase profit, company need to focus on increasing inventory and reduce cogs somehow and it is sure shot that it will improve as we can see in the line charts. From January 2010 to July 2010, it seen that sales have drop little but due to inventory profit has increase by 400k dollar.

Bibliography

Factbox: Recent history of coffee price moves *Source*: https://www.reuters.com/article/us-coffee-prices-idUSTRE72I3HL20110319

Coffee Chains Dataset, Arjun Bhaybhang (2021) *Source*: https://www.kaggle.com/datasets/arjunbhaybhang/coffee-chains-dataset9