

## **EXECUTIVE SUMMARY**

### **BACKGROUND:**

Central Perk has decided to use its customer data which was collected over a period of two years to assess its current operations and generate implementable strategies. While the provided data was unexplored until now, Central Perk believes they have a fairly good idea of their current customer base. They presume their customers are loyal which creates consistent business year over year.

Furthermore, because of Central Perk's presumed loyal customers, the coffee shop isn't necessarily interested in acquiring new customers. Central Perk believes that the relationship they have with their current, loyal customers should be enhanced to generate more revenue.

### **BUSINESS QUESTION :**

Using Central Perk's beliefs and concerns, we developed our key business question. Does the data provided by Central Perk support their beliefs and can it be leveraged to increase their profits without losing customers?

### **FOCUS OF THE EVALUATION:**

In order to effectively address Central Perk's beliefs about customer loyalty, business consistency, and to generate strategies, the evaluation of the data was performed from three angles:

- 1) Identifying purchasing trends for each category of Central Perk's customers.
- 2) Generating insights about customer behavior and assessing them to categorize them as loyal or not.
- 3) Analyze sales at an item level and observe the relationship of one item with another item.

Our reason for focusing on these angles specifically is that they will give us a clear understanding of not just Central Perk's business performance, but also the trends in customer behavior, highest selling items, and more.

As a boutique coffee shop, Central Perk clearly has a unique experience which is why they want to focus on generating more revenue from loyal customers rather than acquire new ones. But, given that Central Perk also has other locations, we want to leverage their data such that our recommendations are equally effective elsewhere as well.

## KEY FINDINGS:

### Trends

#### Operation Level

- Weekends have an average of 2x the transactions to that of weekdays.
- Both weekdays and weekends experience a dip in traffic after 4 PM.
- Weekdays observe maximum traffic between 8 AM - 11 AM period compared to 9 AM - 12 PM for weekends.

### Item Level

- Drip, Latte, and Cappuccino are the top-selling items and Coffee and food are top-selling categories.
- Coffee experiences a dip in sales post 12 PM rush-hour on weekdays.
- Large Drip coffee has a spike in sales at 6 PM on Wednesdays and Thursdays, which is not seen on other days.
- Almonds are the go-to extra when purchasing a Latte or Drip.

### Customer Level

- Customers having a Central Perk membership (a customer ID) for at least 6 months, we can see that only 25% of customers visited more than 3 times in their lifetime and only 6% of customers repeated their transactions in the last 6 months.

This contradicts Central Perk's belief on their high customer loyalty. Based on the data, we applied cluster analysis to effectively segment customers into three distinct clusters using Recency and Frequency as primary metrics.

These clusters were classified as New Customers, Non-Loyals and Loyals.

Cluster	Spent	Recency	Total Visits	Visit frequency	Days Since First Visit	Count
New Customers	12	164	4	0.0335	213	16373
Non-Loyals	9	563	3	0.0049	576	14811
Loyals	217	112	65	0.4805	396	632

## **RECOMMENDATIONS:**

### **1. New Customers**

Our findings from applying association rules show that these items are often purchased together  
(Latte + Almonds)  
(Cappuccino + Almonds)  
(Small Drip + Ice)  
(Small Latte + Ice)

The average number of visits from this cluster was four, over the duration of the dataset. These customers can be incentivized for multiple visits by being given a punch card where after a certain number of visits, they get a free beverage/item of their choice.

Beyond this, we can use the list of most purchased items and sell them as a bundle at a lowered price since ice and almonds as add-ons won't affect the overall revenue dramatically.

Multiple visits and lowered prices on most purchased bundles can enable Central Perk to convert these customers from occasional visits to regular customers to loyal customers, which in the long-term can potentially generate much more revenue from them.

### **2. Non-Loyals**

We found these customers' Recency to be 563 days on average. Given the considerable gap between first and last visits, it is possible that they may have come to New York from a different city, state, or country.

If they are from a city or state where Central Perk has a location in their vicinity, they can be sent direct mail as part of general coupon mailers or if they chose to share their information, they could be sent email offers asking them to experience Central Perk's other offerings and other limited time promotions being run at Central Perk.

### **3. Loyals**

These customers choose to come to Central Perk for its quality and experience. To not make them feel alienated with general promotions for everyone, Central Perk can enhance their experience further by offering personalized offers and promotions based on their ordering history and exclusive discounts on certain items, combos, and seasonal items.

This will also encourage Non-Loyals and New Customers to try Central Perk more often which can convert them into Loyal customers in the future as well.