To: Kelly Anderson, Marketing Executive, Coffee-Chain

From: Zainab Akinjobi, Market Research Assistant

Date: December 4, 2021

Subject: Market Research Analysis from 2018-2019 Financial Year

I am writing to you to let you know the findings, conclusions, and recommendations that I derived from my market data analysis from the data provided by the experimentation team. My goal is to understand the data, extract market-related trends, and provide some guidance on some key performance metrics you can optimize for. I am also hoping some of the questions the analysis in this memo answers will provide you with insights that could guide you on where future multivariate testing could be useful. Please find the summary of my analysis below.

In the small and major markets, California made the highest sales of \$96,892 for the beans and leaves product lines. The beans product line had a higher sales contribution than the leaves in all the states. Looking at the major market alone, California made the highest sale contribution and 60% of it came from the beans product line. It appears the Californian market is one of those markets we need to keep as a stronghold, at least we should strengthen our hold on the market we target with the bean product line. Similarly, In the small markets, Nevada had the highest sales contribution and 88% of it came from the leaves product line. The beans product line made more sales in impact in the major market while the leaves product line made more sales impact in the small market. These insights suggest our strongest markets are on the west coast of the U.S. We may want to look into other west coast markets like Oregon and Washington to understand how we can leverage our success in California and Nevada. Perhaps, some sort of experimentation should work here in determining the appropriate product class to push forth. Also, the data suggests that product lines should be stocked in the market and states according to the impact they make on sales. Thus, prioritizing stocking the beans product line in the major market and the leaves product line in the small market seems like a good idea. I advise that the experimentation team could perform multivariate testing to understand where this hypothesis might fail and appropriate actions should be taken.

For the product analysis, I noticed that the Colombian product type, which belongs to the beans product line, generated the highest profit in the major market. In the small market, the top three products with the highest profit were Lemon, Chamomile, and Darjeeling. They all belong to the leave product line which is consistent with the sales impact from the product lines. This

suggests that the higher the sales, the higher the profits generated in the small and major markets.

From my analysis by states for all the markets, Connecticut, Massachusetts, and New Hampshire were the states that met the budget sales for the products. The products Ammareto, Colombian, and Decaf Irish Cream were the three products that did not meet the target sales in all the states.

All the days in the first quarter of 2019 were profitable in both markets. The quarter with the least profitable number of days for both markets was the first quarter of 2018. In 2018, 10 days were not profitable and in 2019, 7 days were not profitable. Our Company had more profitable days than nonprofitable days, overall. Although we made more profit in 2019 (\$72,814) than in 2018 (\$64712), our Company made a continuous profit in 2018 and 2019. In the small market, the company made a very close range of profits in 2018 (\$61081) and 2019 (\$60333).

For inventory analysis, we had the highest inventory in December 2018 and the lowest in July 2018. The company had its highest inventory on the last day of April 2019, and its least inventory on the first day of September 2019. In the major market, the highest inventory was recorded on the 30th of April 2019. The change in inventory for a month based on the difference of the first and last-day inventory suggests that the inventory decreased for 12 distinct months(not necessarily consecutive months). This leaves 12 other months with an increase in inventory. In the small market, the highest inventory was recorded on the 31st of December 2019. The change in inventory for a month based on the difference of the first and last-day inventory shows that the inventory decreased for 12 distinct months(not necessarily consecutive months). This leaves 12 other months with an increase in inventory.

Those are my summaries and I hope you find them helpful and they provide insights that can guide decisions that move us forward.

Thank	you.

Zainab.