LAFC Food and Beverage Report

- Findings and Strategic Recommendations -

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1 Findings and Recommendations

1.1 Introduction

In this paper, I went about analyzing the dataset by considering ways to increase our revenue throughput and cap. Increasing throughput is reducing friction in each transaction in order to conduct more transactions in the same amount of time, i.e. in-stadium food delivery, while increasing per cap is driving each buyer to spend more. Both increase our top line net sales, but are two different ways to go about it.

1.2 Vendor Profit Margins

The first thing I found important to include is that different vendors have different margins on their gross net sales. For instance, we sell a Dasani 20 OZ Water Bottle for $4 at each vendor. For Vendor "Port 307 Beer & Snacks", the net sale of this item is $2, meaning that it has a 50 percent profit margin. However, for Vendor "Sunset Deck" the net sale of this item is $4, meaning it has a perfect profit margin. If these numbers are true, LAFC should incentivize selling food and beverages at the stands with better margins by placing it in more populated and easy to access areas of the stadium.

1.3 Sum of NetSales by Hours from Kickoff

Figure 1: Sum of Net Sales by Hours from Kickoff
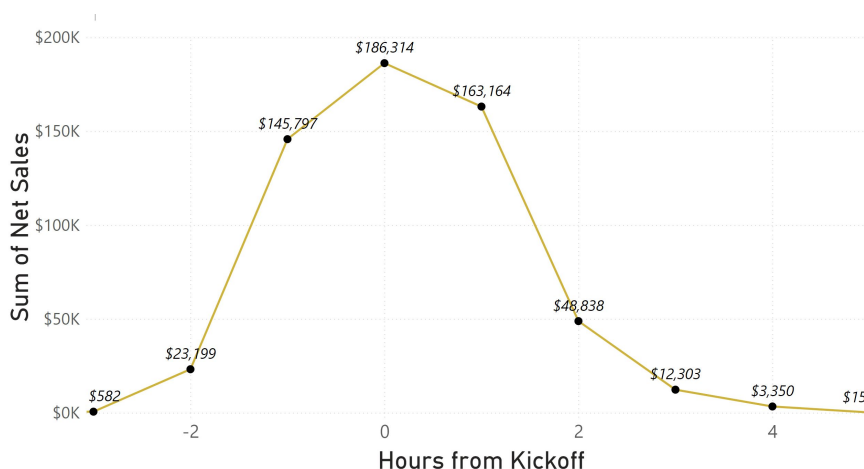
Another thing I found meaningful to analyze was how the time from kickoff affects sales. To construct the graph above, I searched up all 2018 kickoff times and then subtracted the hour of transaction by a said game's kickoff time. We can see that most transactions were made 1 hour before kickoff to 1 hour after kickoff. This makes practical sense, as people are probably going to be buying the most before the game and at halftime.

Wait time is a major deterrent for fans when ordering food and beverages, and I'm curious to see if we could increase the magnitude of our slope by reducing these wait times through in-stadium food delivery. In addition, I would like to see data from the current season, as I understand that LAFC introduced mobile ordering during the 2019 year. According to a study conducted by Global Oracle in 2019, "59 percent of fans would spend more on concessions if their wait time were cut in half", and "68 percent were highly interested in using a mobile application to order food and beverage" while "63 percent said they would use a self-service kiosk, mobile app or tablet for purchases." I'm curious to

see if the magnitude of our slope drastically increased given the introduction of mobile ordering. I would like to analyze this difference in slope because it could provide better metrics to judge if in-stadium food delivery is worth it. LAFC could increase net sales during peak hours from in-stadium food delivery, just as mobile ordering may have done, by having food from concession stands brought to all customers at their seats, not just club or suite members. From the same study published by Global Oracle, "nearly 30 percent of fans globally ranked being able to stay in their seats as the most important way to improve the food and beverage experience at the stadium". However, we must conduct plenty of research and keep in mind the payment of extra employees if we consider in stadium food delivery to see if the margins are even worth it.

1.4 Areas of Improvement for Timing

Some things which I think LAFC can work on is reducing the massive drop off of revenue from 1 to 2 hours after kickoff, which is when football matches typically conclude. Once a sports game is over, people are accustomed to leaving and grabbing dinner or drinks elsewhere. I think a great way to increase our per cap revenue is to somehow have these customers stay, eat, and drink at BMO.

Figure 2: Net Sales from 2 to 1 Hour Before Kickoff Explained by Type of Purchase
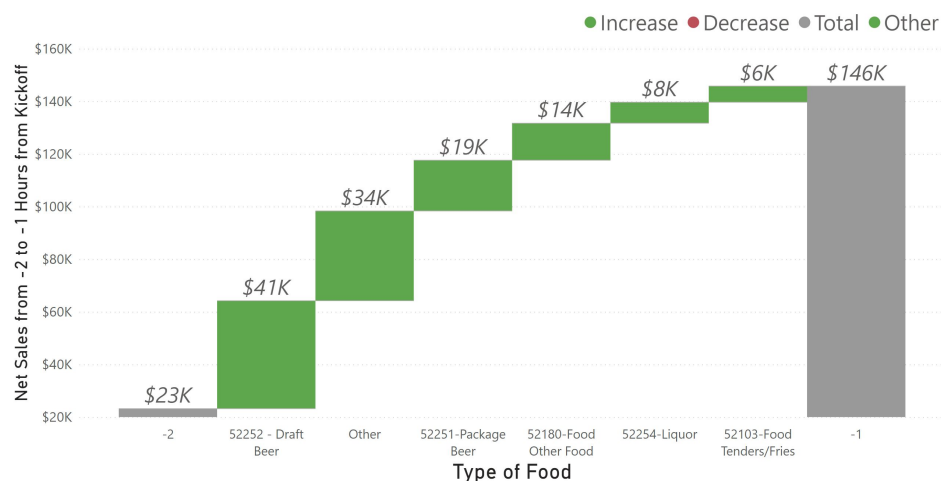
Figure 3: Net Sales from 2 to 1 Hour After Kickoff Explained by Type of Purchase
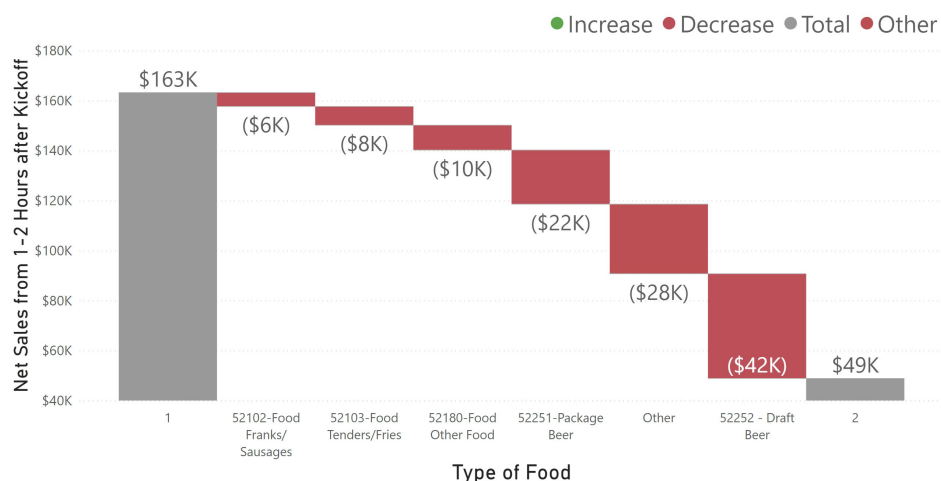
From Figure 2, we can see that the majority of our increase in Netsales before kickoff from -2 to -1 hours can be explained by alcohol. "Draftbeer" and "Package beer" make up around $60k of increased net sales from two to one hours before kickoff, which is about 48.78% of the total increase of $123k.

On the otherhand, Figure 3 illustrates that "Draftbeer" and "Package Beer" account for $64k of decreased net sales, which is about 56.14% of the total decrease of $114k from 1 to 2 hours after kickoff. Considering this massive decrease in sales after the game, perhaps we could create a system where if a fan buys beer at the start, halftime, and end of the game, the price of beer will be sold at a discounted price. For instance, LAFC could set up an order option at concession stands which gives out a QR code which only scans in periodic windows before the game, at halftime, and at the end. The price per beer will be less than those who do not use a QR code, so our green bars in Figure 2 will decrease slightly in magnitude. However, the total price paid for this package would allow for an overall net increase as the amount of beers sold would increase, resulting in a size decrease of the red bars in Figure 3. Basically we mimic Costco and try to sell more quantity at a cheaper price. This idea has a lot of risk, and may not be worth the time and effort to implement, which is why we need some survey data asking whether or not fans are even open to consuming beer after the match.

1.5 Type of Transaction and Vendor Group

I also analyzed the pricing of each transaction through grouping transactions based upon total price paid. To do this, I multiplied the quantity and price columns together and grouped this value into $0-24.99, $25-49.99, $50-99.99, $100+. I chose these four groups because I believe purchases over $50 illustrates a group order.

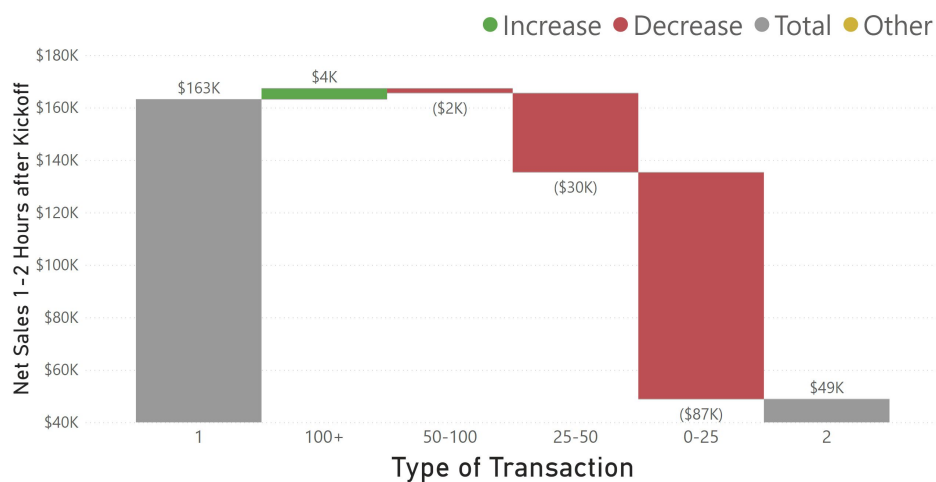**Figure 4:** Net Sales from 1 to 2 Hours After Kickoff Explained by Price of Transaction

Figure 4 illustrates that group orders were common post match, as the only type of transaction which increased their net sales from 1 to 2 hours after kickoff was the $100+ transaction group. Figures 5 and 6 tell the story that the suites dominated these purchases post-game, as they hold around 74.74% of the total $100+ transactions made, while also being the only vendor group which increased sales 1 to 2 hours after kickoff. I hypothesize that the suites and $100+ transactions are correlated and only groups to increase post-match because suites are the only type of seats to offer the space and resources to

celebrate a win.

**Figure 5:** Net Sales From 1 to 2Hours after Kickoff by Vendor Group
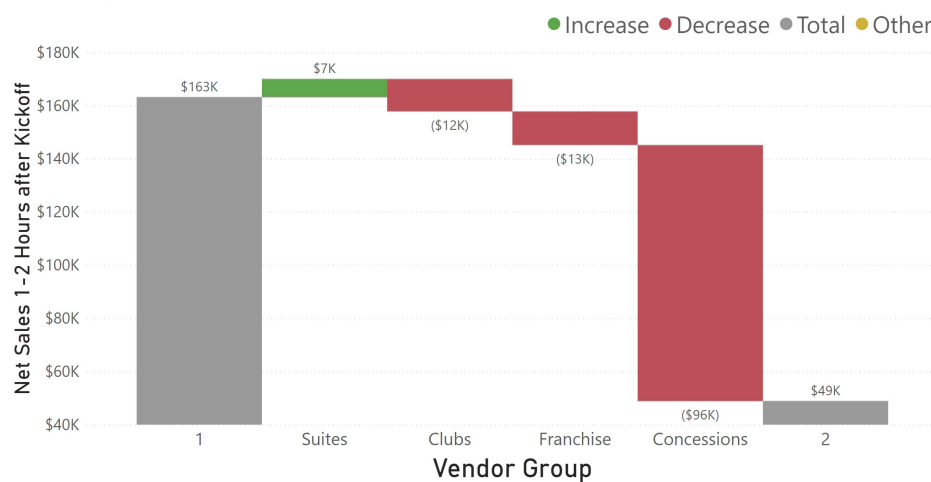
This hypothesis leads me to believe that LAFC should host parties, have live music, start chants, and reserve open areas for celebration, especially near concession stands to reduce a drop off in net sales post match. Concessions' Net Sales have a decrease of nearly $100k just one hour after the game, and purchases less than $25 are decreasing by nearly $87k in this one hour as well. LAFC's fans are very united, as seen from the 3252's pre game antics against Houston Dynamo, and LAFC can increase their net sales through utilizing this camaraderie by having these fans stay and celebrate post-match.

Figure 6: Percent Breakdown of $100+ Transactions by Vendor Group Type
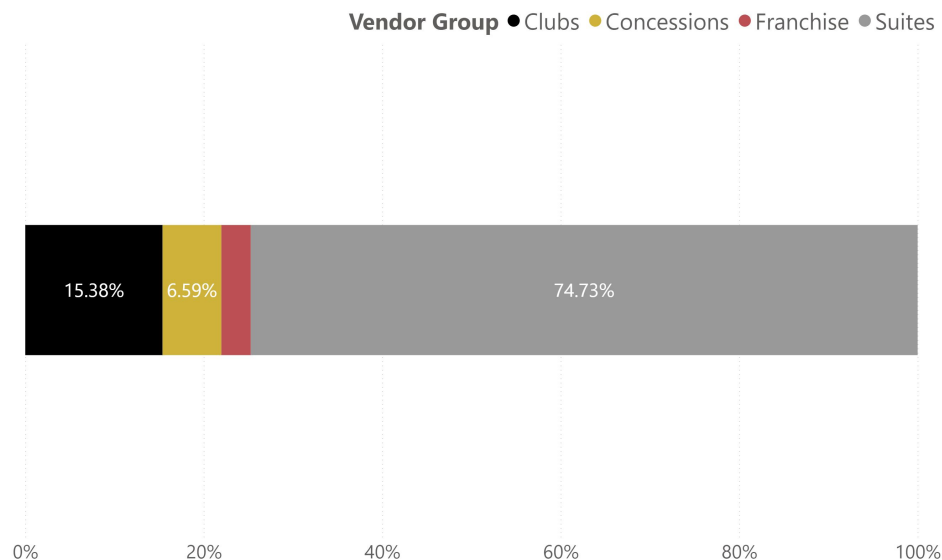
Naturally, this claim led me to conduct analysis on just the Supporter's Bar, as one can argue that LAFC already has this area behind the ultras. However, Figure 7, which depicts Net Sales of just the Supporter's Bar, still illustrates a significant dropoff post-match. Specifically, the Supporter's Bar generates $12,916 in Net Sales 1 hour after kickoff, to just $2,933 2 hours after kickoff.

Figure 7: Net Sales of Just Supporter's Bar From 1 to 2 Hours after Kickoff by Vendor Group
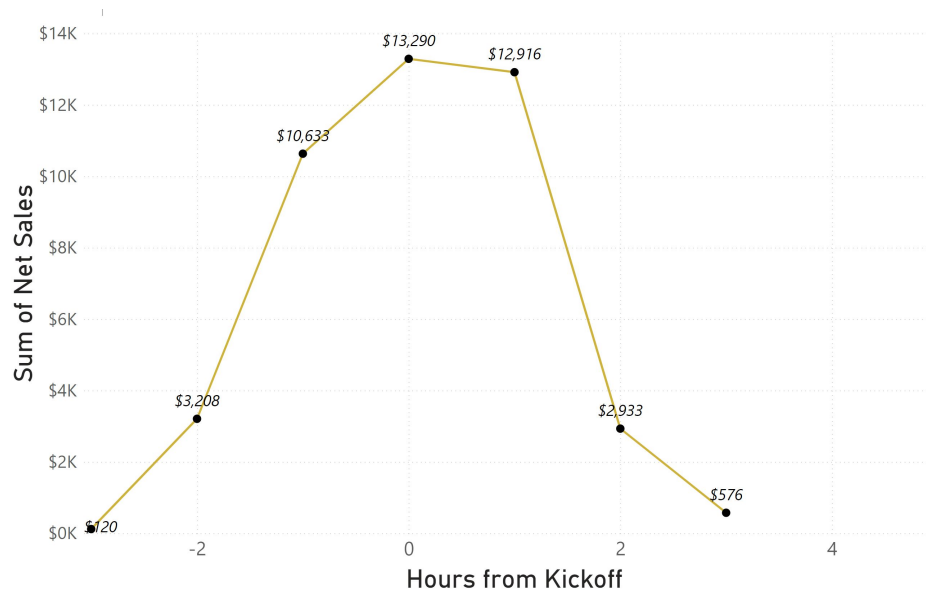
Clearly, the data shows a great way to increase revenue is to involve fans who buy from the concession stands more after the game. In fact, Concessions dominate LAFC's total food and beverage sales making up 68.8% of total net sales and 73.47% of total transactions. However, there are many issues and additional data to consider when thinking about how to execute this recommendation. Firstly, this idea for a designated celebration area could lead to property damage, as LAFC's fans get really rowdy. In addition, nobody wants to celebrate or hang around after a loss, meaning the financial profit may not even be realized. Additional survey data analyzing our fans enthusiasm about this idea can provide better metrics and allow us to see if the pros outweigh the cons of creating an area of celebration around our concession stands.

2 Summary of Possible Action Items

1. Placing vendors with better profit margins at more populated and busy areas of stadium.

2. Analyze most recent season's data vs. the 2018 season to judge how much mobile ordering increased our net sales during peak hours. This will provide LAFC with better metrics and margins to determine if in stadium food delivery is worth implementing for fans not just seated in clubs and suites.

3. Create a package deal for beer to increase throughput which implements a QR code that only scans in limited, periodic windows before the game, at halftime, and after such that we generate more revenue after the conclusion of matches.

4. Involve fans more after the game through hosting parties, playing live music, starting chants, and reserving open areas of the stadium for celebration near concession stands/franchises so fans are spending their money at BMO instead of restaurants and bars elsewhere.

3 Additional Analysis

3.1 Day Type

This is not part of the formal report, but I had too much fun with this project so I wrote an extra page.

Table 1: Average Net Sales by Day Type

Day Type	Net Sales	Games Played	Net Sale per Match
Weekend	$395,591	14	$28,256
Weekday	$188,155	9	$20,906
Total	$558,747	22	$26,533

From the table above, we can see that Net Sales by Day Type is much less when the match takes place during the Weekday. Specifically, the average net sale per match by Weekday is $7,350 less than that of the Weekend matches.
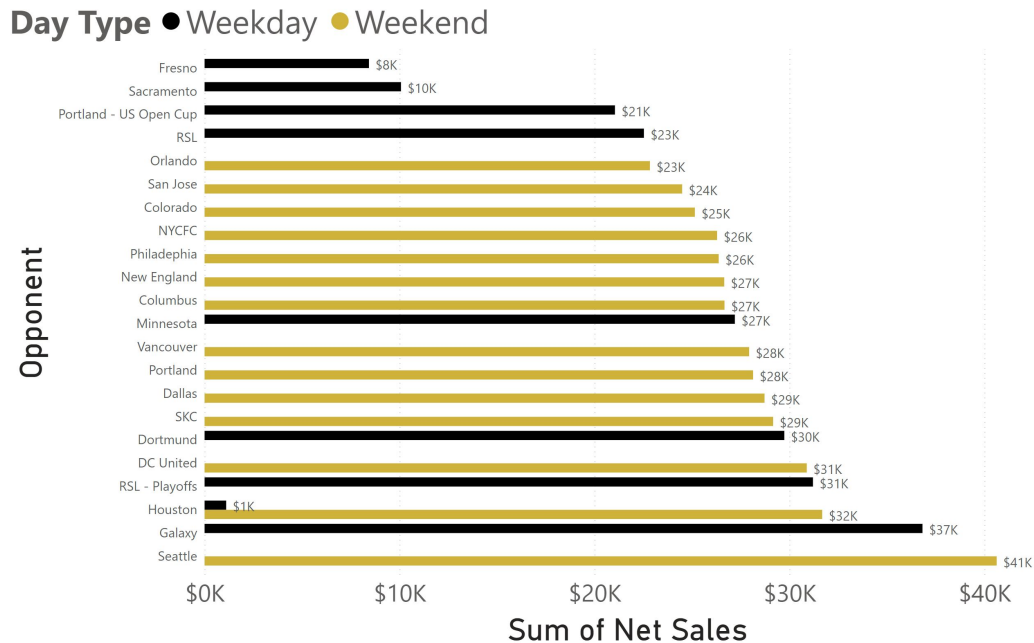
Figure 8: Sum of Net Sales by Opponent and Day Type

However a closer look at the data from Figure 7 tells us that these numbers are misleading and that there may not exist a strong negative correlation between day type and Net Sales. If we look at the two games which generated the least amount of net sales, we find that Fresno and Sacramento are two USL teams. Statistically less people show up to USL games, therefore less money will be spent on Food and Beverages, meaning we cannot conclude that this difference is because of the day type. Additionally, under the third to bottom row, we find Houston generated only $1k of net sales during a weekday match vs $32k during their weekend match. However, upon closer inspection, we find there was an error in data collection, as both values come from the same matchdate of 10/12/2018. Excluding these outliers, we find that there is not much of a difference between net sales by daytype. The reason why I decided to include this in the report was to illustrate to you my diligence, caution, and attention to detail when analyzing data, as a wrong interpretation could lead to costly mistakes.