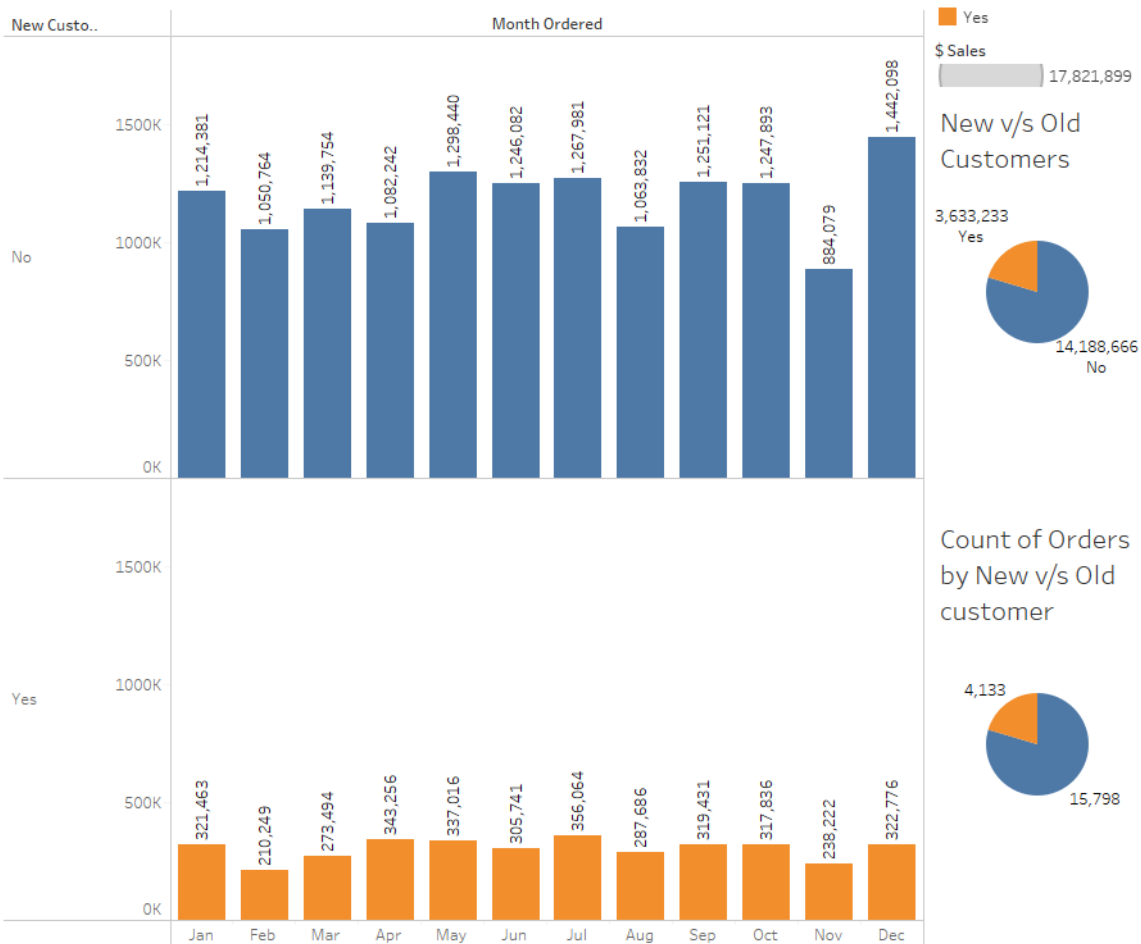


DS-620 Week 2 Assignment

Ritesh Kumar B

There are 14 different attributes in the data set that has been provided. This probably is a dataset for juice bars for 7 different locations. This sales dataset spans from 2018 to 2020. Orders were placed only until 2020, but there were orders delivered until 2021 (more about that in the further analysis) This dataset captures different attributes such that, if a customer is a new or an old customer?, a unique OrderID for each order placed, when the order was placed and delivered, the time taken to deliver, what day, month and year the customer placed that order, the service and product satisfaction rating for the respective order and so on.

Sales for a given month by new or old customer



ANALYSIS:

- Sales are the most during December, which is the end of the year. This shift in consumer habits can be justified by saying that a lot of people tend to build new resolutions for new years and these mostly include healthy habits, such as workout and healthy diet. This is where the Juice / Smoothies market can be tapped into.

- Majority of the Sales are from our previous customers **(\$14 million)**
- Over the span of 3 years, the business was able to acquire **4.1K** new customers and sell Juices and Smoothies worth **\$17.8 million**.
- Most of our new customers discover our Juice/Smoothies during Summer, in the month July
- Regular customers have seen to be consuming less during November and the business has least new customers in the month of Feb.

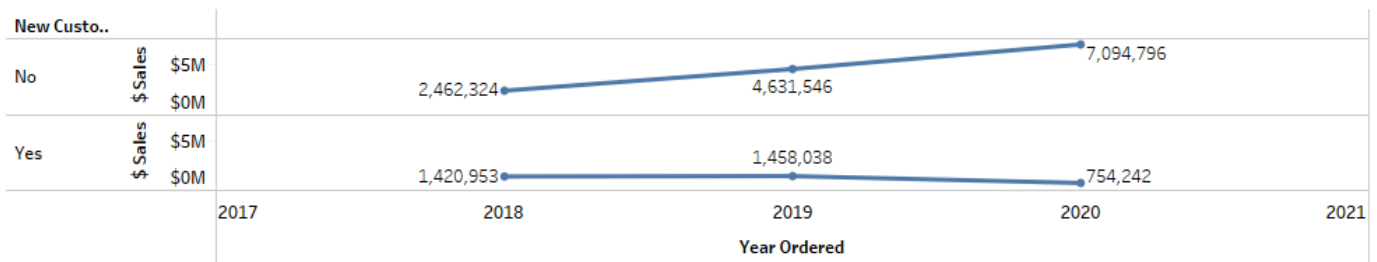
Sales and Average Sales by Year for Product Categories

Categ..		2017	2018	2019	2020	2021
Smoothies	\$ Sales		1,730,410	2,728,086	3,468,513	
	Avg. \$ Sales		854	893	900	
Juices	\$ Sales		2,152,867	3,361,499	4,380,525	
	Avg. \$ Sales		877	913	901	

\$Sales for Orders and Deliveries by Year, Quarter & month

Month Order..	Date Ordered / Date Delivered														
	2018					2019					2020				
	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2019	Q1 2019	Q2 2019	Q3 2019	Q4 2019	2020	Q1 2020	Q2 2020	Q3 2020	Q4 2020	2021
Jan	337,577					579,172					619,095				
Feb	213,180					402,152					645,680				
Mar	377,506					455,473					580,268				
Apr		388,823					519,778					516,897			
May		346,667					542,441					746,349			
Jun		333,559					525,918					692,346			
Jul			352,353					590,642					681,049		
Aug			276,253					399,206					676,058		
Sep			328,679					486,754					755,119		
Oct				264,143					623,441					678,145	
Nov				304,573					347,968					469,760	
Dec				296,415	63,548				501,872	114,766				649,895	138,377

Sales for years by new or old customer

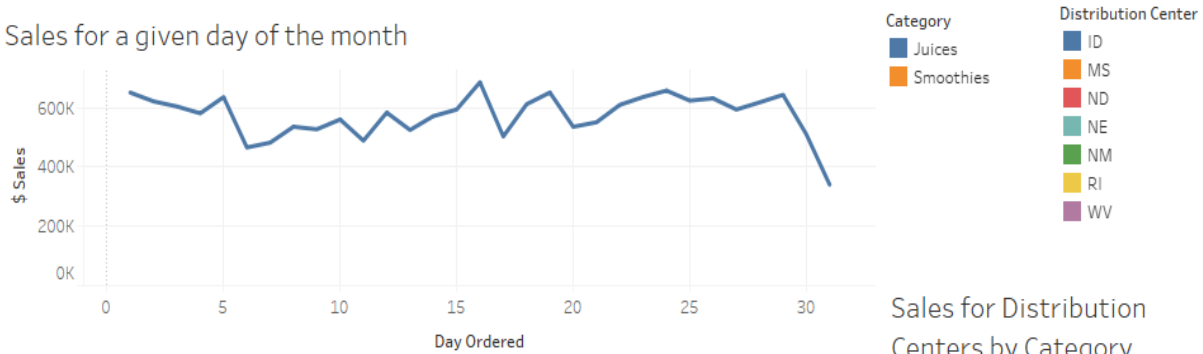


ANALYSIS:

- Juices sell the most when compared against Smoothies, However both the categories seem to be progressing YoY

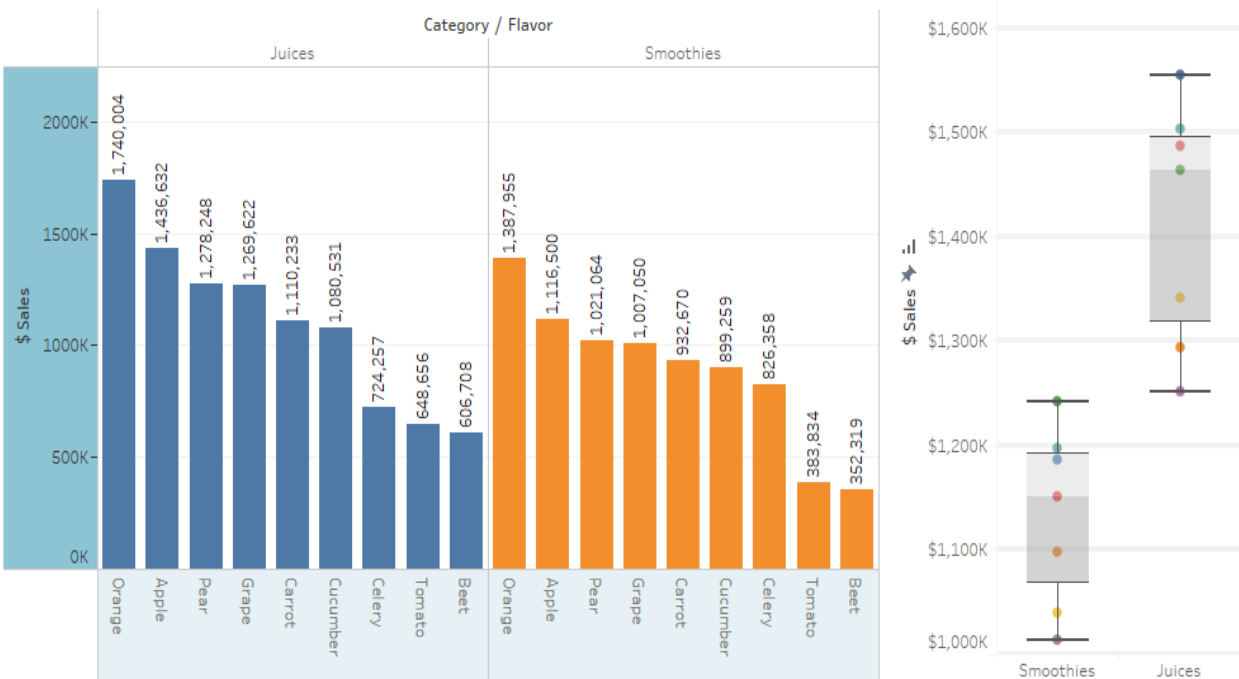
- Average spending of customers for Smoothies has increased, where as for Juices, it spiked in 2019 but reduced back again in 2020
- Thousands of dollars worth orders are being placed prior, scheduled for delivery for the following year, and the numbers are increasing YoY.
- New Customers spending is observed to be declining and the vice versa for Old Customers.

Sales for a given day of the month



Sales for Distribution Centers by Category

Sales by Product Category and Flavors



ANALYSIS:

- Orders are most during the beginning & middle of the month
- Consumer spending is the least during the end of the month at the juice bars.
- Orange and Apple are the 2 flavors that sell the most in both the categories.
- Beet & Tomato flavors are the least selling in both the categories.

- The box-and-whisker plot tells us which of the locations are out performing and underperforming when compared against each other for 2 different Categories.
- There are 2 locations in both Upper and Lower Hinge for both the Categories.
- NE Distribution Center is outperforming in both the categories.
- Most sales for Smoothies come from Distribution Center **NM**, while it is **ID** for Juices.

STRATEGIES:

- Since this market/industry resonates with health, a subscription model can be introduced.
- Appropriate advertising to help consumers stick to their health goals can be a good strategy to gain new customers back, where a declining trend was seen.
- To boost sales at locations with less orders, discounts or combos can be introduced.
- These discounts/combos should be limited to specific days. We saw that spending was most during the beginning and middle of the month.
- Considering that the business had 2 categories only, more fruit flavors should be added in the menu.