

Data Science and Analytics Bootcamp with Stack Education
Framingham State University

Basin Skin Care Store Data Analysis

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INTRODUCTION

- Basic Sun Preparation is a skincare product
- Monthly sales data analyzed to increase Sales
- Data used for analysis are from:
 - multiple stores across the nation
 - region of the stores
 - Characteristics
 - product shelf space use
 - sales performance

Summary of data for Total Sales for different Format Type
(inclusive of taxes)

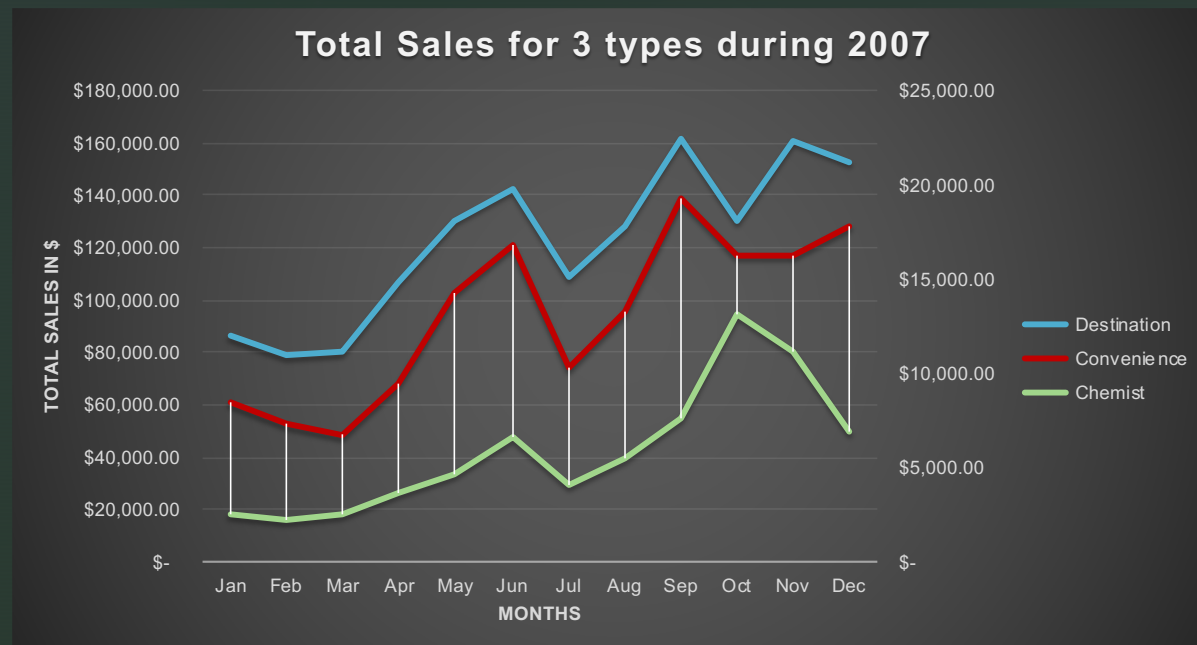
	Chemist	Destination	Convenience
Total	\$ 74,083.14	\$ 1,515,225.33	\$ 90,090.74
Average	\$ 881.94	\$ 1,426.77	\$ 1,668.35
Min	\$ 87.89	\$ 43.28	\$ 195.48
Max	\$ 3,681.90	\$ 4,594.17	\$ 4,244.46
Quantile 99%	\$ 3,087.80	\$ 3,967.73	\$ 4,090.07
Quantile 1%	\$ 142.73	\$ 127.53	\$ 232.50
Values in top 1%	1	11	1
Values in bottom 1%	1	11	1

Summary of data for NDSA for different Format Type (Non-dispensible trading area)

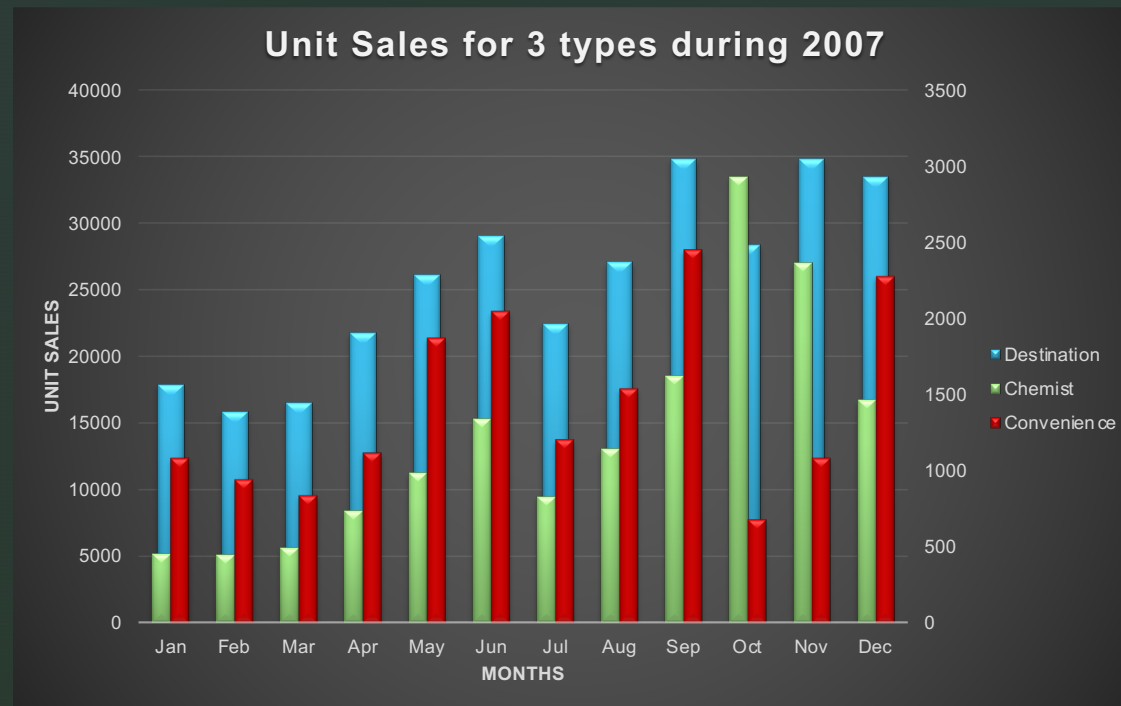
	Chemist	Destination	Convenience
Total	20652	740559	20002
Average	246	697	370
Min	199	199	215
Max	294	2652	777
Quantile 99%	294	2147	777
Quantile 1%	199	199	215
Values in top 1%	0	9	0
Values in bottom 1%	0	0	0

Total Sales in 2007 for different Format Type

Sum of Sales_TISP	Chemist	Convenience	Destination
Jan	\$ 2,548.35	\$ 5,842.33	\$ 86,801.97
Feb	\$ 2,214.63	\$ 5,142.79	\$ 78,903.34
Mar	\$ 2,470.73	\$ 4,242.86	\$ 80,680.20
Apr	\$ 3,657.86	\$ 5,765.36	\$ 107,007.96
May	\$ 4,648.94	\$ 9,542.51	\$ 129,629.86
Jun	\$ 6,595.04	\$ 10,134.50	\$ 142,732.50
Jul	\$ 4,024.99	\$ 6,335.08	\$ 108,949.81
Aug	\$ 5,449.03	\$ 7,795.85	\$ 128,091.99
Sep	\$ 7,581.86	\$ 11,688.59	\$ 161,519.47
Oct	\$ 13,127.48	\$ 3,092.67	\$ 130,376.30
Nov	\$ 11,091.64	\$ 5,187.97	\$ 160,837.37
Dec	\$ 6,902.80	\$ 10,880.29	\$ 152,861.71

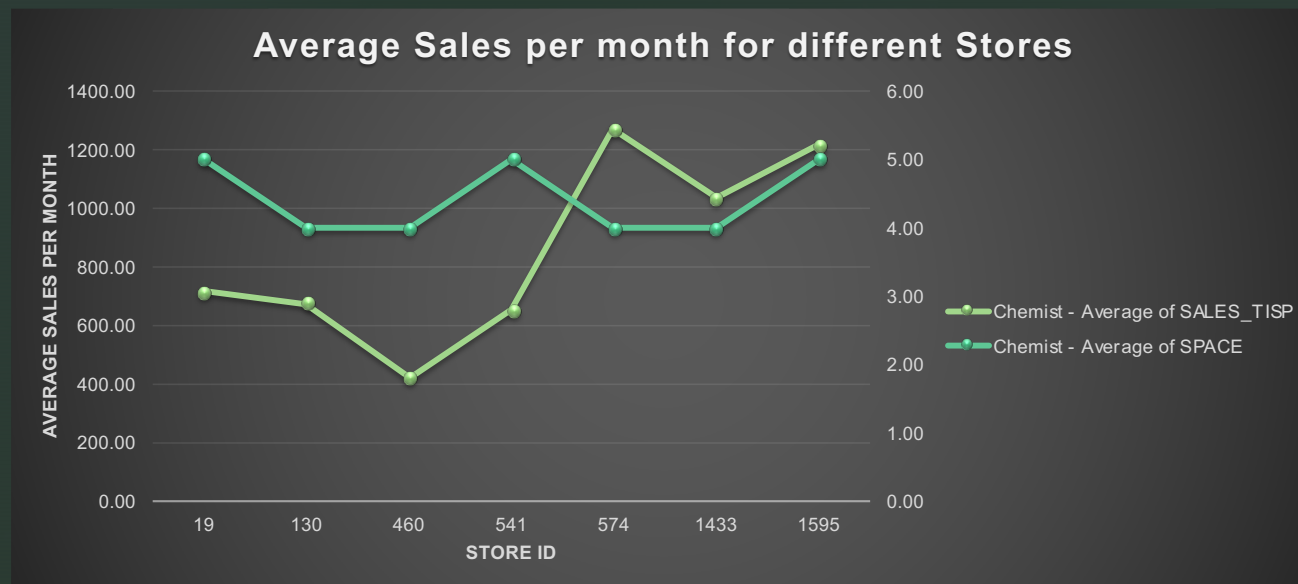


- Since the magnitude of the Total Sales was significantly higher for the Destination Format type a secondary axis was chosen to plot data for Chemist and Convenience Types to better visualize the trends
- For all three Format types the beginning of the year has been slow for Sales
- Chart suggests to focus during the months of Jan-Apr to Improve Sales



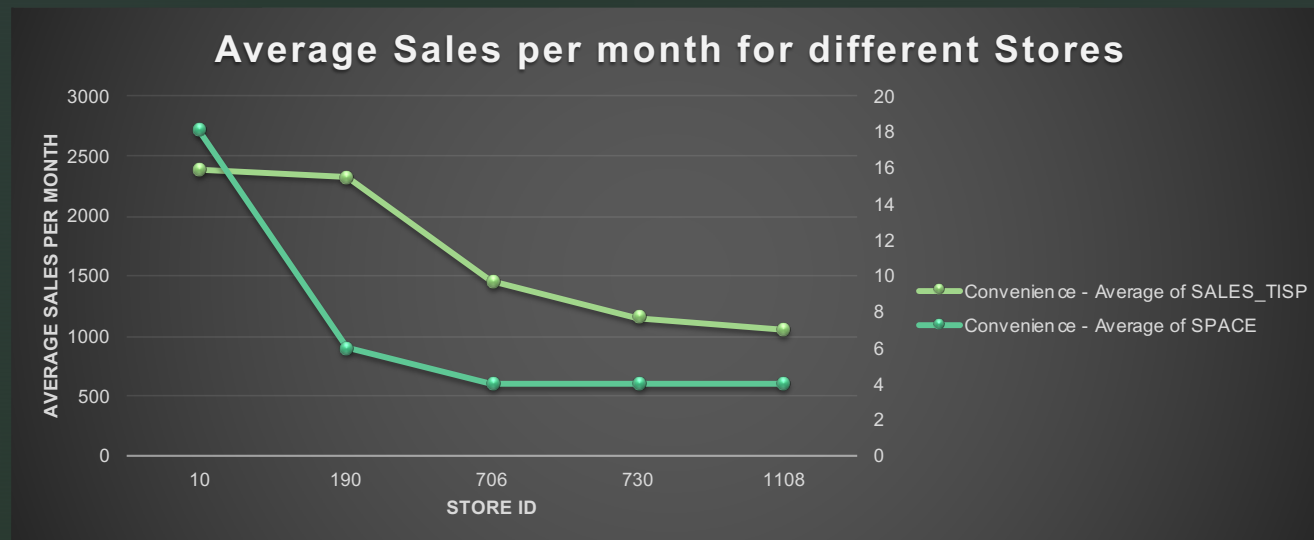
- Since the magnitude of the Unit Sales was significantly higher for the Destination Format type a secondary axis was chosen to plot data to better visualize the trends
- This chart boosts the previous conclusion drawn that Jan-Apr can be the months to focus on increasing Sales

CHEMIST FORMAT TYPE



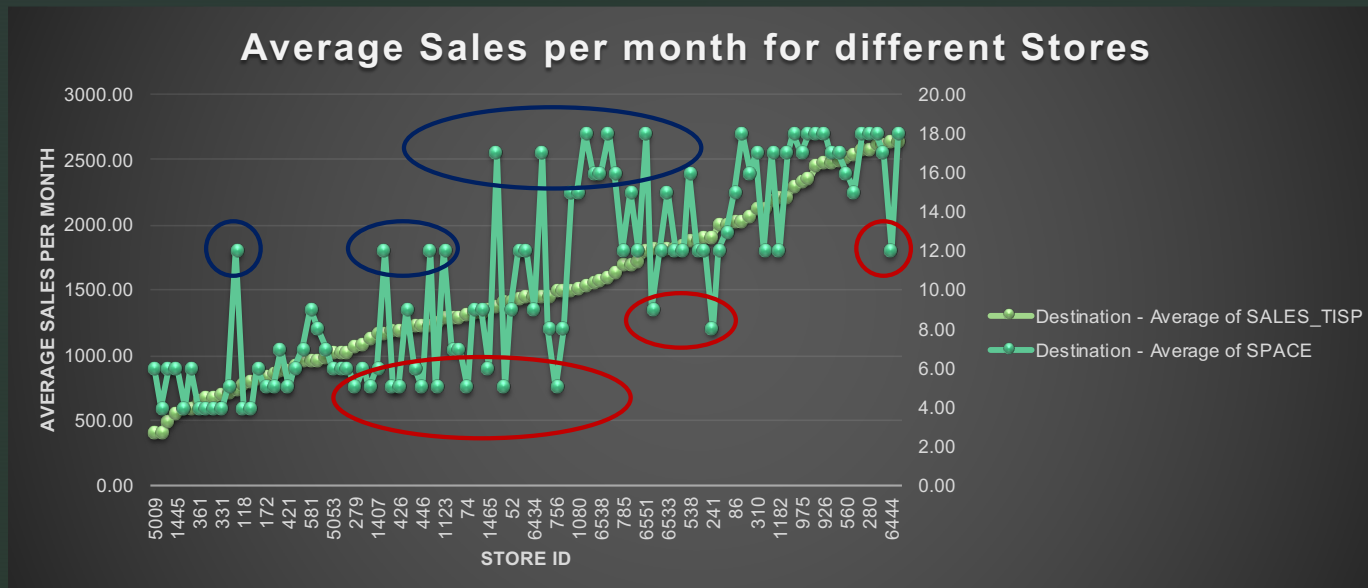
- This chart shows the performance of each store for Chemist Type with respect to Average Sales per month on the left axis and Shelf Space on the right axis
- The chart identifies stores having similar shelf space as others but perform poor on Sales
- For stores 19,130,460, 541 either there is not enough Supply and shelves are empty, in which case supply can be increased, or shelves are full but there aren't enough sales in which case promotional sales or ad campaigns can be introduced

CONVENIENCE FORMAT TYPE



- This chart shows the performance of each store for Convenience Type with respect to Average Sales per month on the left axis and Shelf Space on the right axis
- The chart suggests that as the Shelf space has reduced Sales have reduced
- These stores are very good candidates to increase Shelf Space to see increase in Sales
- Especially Store 190 shows that even though its Shelf Space is significantly lower than Store 10 its sales are almost comparable indicating this store has high demand

DESTINATION FORMAT TYPE



- This chart shows the performance of each store for Destination Type with respect to Average Sales per month on the left axis and Shelf Space on the right axis
- The chart identifies the stores that have either similar or more shelf space as others but perform poor on Sales and also identifies stores that have much less Shelf space but have better Sales
- Highlighted in Blue are stores that have enough Shelf space but can use ad campaigns or promotional sales to effectively increase the sales
- Highlighted in red are stores that can increase Shelf space to further sales due to high demand



Summary of Analysis

- Basic Sun Preparation, a skincare product, monthly sales have been analyzed
 - Ideal months that can be targeted to focus on increasing sales have been identified
 - Stores across the region with different Format Types that can be targeted to increase sales have been identified
 - Stores that need more Shelf Space and those that need more advertisement or promotions have been identified
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