



**Project - Technical Project Report Phase-1
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1. Company Overview

Conagra Brands, headquartered in Chicago, Illinois, is a North American packaged foods company. Since its inception in 1919, the company has grown to become one of the largest packaged foods companies in the United States. Conagra Brands' portfolio includes well-known brands like Chef Boyardee, Hunt's, Orville Redenbacher's, PAM, Peter Pan, and Slim Jim.

Conagra Brands manufactures a diverse range of food products such as frozen meals, canned goods, snacks, condiments, and more. Customers in the United States, Canada, and other international markets are served by the company's presence in both the retail and foodservice channels.

Conagra Brands has prioritized sustainability and innovation lately. To adapt to shifting consumer expectations, the company has created new items like plant-based meat substitutes and healthier snack options. Conagra Brands has also pledged to lessen its influence on the environment, with targets to cut greenhouse gas emissions and enhance packaging sustainability.



2. Data Set Overview

The Conagra dataset contains sales and distribution data for Conagra's food and household products in various markets across the United States. The dataset is divided into several sub-datasets, each of which contains unique information such as sales volume, revenue, product attributes, and promotional activities.

The IRI POS datasets provide point-of-sale data on Conagra's product sales volume, revenue, and distribution in various retail channels such as grocery stores and online retailers. The IRI POS datasets also show the effect of promotional activities like discounts and advertising campaigns on sales volume and revenue. This type of dataset consists of 10 excel sheets provided by Conagra for prediction analytics analysis.

The IRI Panel datasets provide consumer-level data on Conagra's products' purchasing behavior and product preferences. Household purchases, market penetration, market share, buyer behavior, demographic trends, and product preferences are all included in the datasets. Conagra provides 2 excel sheets for this type of dataset to analyze for prediction analytics.

Overall, the Conagra dataset is a valuable resource for businesses and analysts seeking insights into consumer behavior, product distribution, and sales performance for Conagra's products. This data can be used to inform business decisions and optimize business strategies.



3. Market Research of Product Categories

3.1 Table spreads

According to Grand View Research, the global table spreads market was worth USD 7.89 billion in 2020 and is predicted to increase at a compound annual growth rate (CAGR) of 4.9% between 2021 and 2028. The market is anticipated to increase during this time due to rising consumer health consciousness and rising demand for natural and organic spreads. The Grand View Research report also emphasizes how nut-based spreads, including almond and cashew butter, are becoming more and more well-liked as a nutritious and protein-rich substitute for conventional spreads. Besides boosting their demand in the market, consumers who follow vegan or plant-based diets like nut-based spreads.

According to Statista, the butter and margarine market in the United States was valued at roughly \$7.7 billion in 2020. With a market value of around \$4.1 billion, the margarine category in this market had a bigger share than butter, which had a market value of about \$3.6 billion. Furthermore, according to the report, butter has become more and more popular as a natural alternative to margarine as well as health concerns regarding its effects on human health. In contrast, as customers become more health conscious and environmentally sensitive, the demand for organic and plant-based spreads has increased. With a rise in demand for organic and plant-based spreads, these trends are probably still present in 2023.

Below are some basic descriptions and compositions of the table spread categories.

- 3.1.1 Total Butter** is a dairy product created by agitating milk or cream until the butterfat separates from the liquid. The butterfat is then washed with water, kneaded, and possibly salted to create the final product. Since it is high in saturated fat and cholesterol, it should be consumed in moderation. Butter is a versatile and delectable ingredient that can enhance the taste and texture of many dishes.
- 3.1.2 Stick Butter** is a type of butter produced by first pressing the butterfat into a stick-like shape after milk or cream has been churned to separate the butterfat from the liquid. Stick butter is a versatile component in cooking and baking due to its rich, creamy texture and somewhat sweet, nutty flavor, just like other varieties of butter. It is used in moderation for a healthy and balanced diet.
- 3.1.3 Tub Butter** is a type of butter that comes in a plastic container or tub, rather than the traditional rectangular stick shape. The production process of tub butter is, whereby milk or cream is churned to separate the butterfat from the liquid. The butterfat is then washed, shaped, and packaged in a tub with a lid to maintain freshness. Tub butter is commonly available in a variety of flavors such as garlic, herb, or honey, as well as low-fat or plant-based alternatives.
- 3.1.4 Total Margarine** is a non-dairy, vegetable-based spread that was invented in the 19th century as a cheaper substitute for butter. It is produced by mixing water, emulsifiers, salt, vitamins, and artificial colors or tastes with vegetable oils such as soybean, canola, or palm oil. Margarine is promoted as a healthier



alternative to butter as it contains less saturated fat and cholesterol. It comes in a variety of flavors, including plain, herb, and garlic, as well as reduced-fat and plant-based options.

- 3.1.5 Stick Margarine** is a type of margarine that is sold in the shape of rectangular sticks, close to butter. It is made from a combination of vegetable oils, water, emulsifiers, and other ingredients and is frequently marketed as a healthier alternative to butter due to its lower levels of saturated fat and cholesterol. It is made by combining vegetable oils with water and emulsifiers, then heating, cooling, and churning the mixture until it becomes a solid form that can be shaped into sticks.
- 3.1.6 Tub Margarine** is margarine sold in a plastic tub or container rather than the traditional rectangular stick shape. It is frequently marketed as a healthier alternative to butter as it has lower levels of saturated fat and cholesterol. It is made by combining vegetable oils, water, and emulsifiers, then heating, cooling, and churning the mixture until it is soft and spreadable enough to be packaged in a plastic tub. It is mostly available in a variety of flavors and in both regular and reduced-fat versions.

3.2 Cooking Spray

According to MarketsandMarkets, the global cooking spray market was worth USD 1.14 billion in 2020, with the United States being one of the leading markets. The cooking spray market in the United States was valued at USD 149.3 million in 2020, with a 5.5% compound annual growth rate (CAGR) expected from 2021 to 2028.

One of the primary drivers of the cooking spray industry in the United States is the growing popularity of home cooking, which has been accelerated by the COVID-19 pandemic. The market is being driven by consumers' increased interest in healthier cooking methods and their growing health consciousness. Cooking spray is frequently touted as a healthier alternative to typical cooking oils since it can minimize the amount of oil used in cooking while also being lower in calories and fat.

Another factor driving the market is consumer awareness of the potential health dangers linked with various chemical additives generally used in cooking oils. Overall, the cooking spray market in the United States is likely to expand in the coming years, owing to rising demand for convenient and nutritious cooking solutions.

- 3.2.1 Cooking spray** is a substance used in the kitchen to add a thin layer of oil to cooking surfaces and prevent food from sticking, making it a helpful tool for both home cooks and professional chefs to use it conveniently on cooking surfaces such as pans, grills, or baking sheets. It normally comes in an aerosol can and contains a mixture of emulsifiers and oils that enable a thin and even application. Depending on the brand and type, cooking spray's contents might change, but they often consist of a mixture of vegetable oil, canola oil, soybean oil, or other types of oils like an emulsifier.



3.3 Cooking & Salad Oil

The cooking and salad oil business in the United States is mature, with intense competition. The retail sales value of cooking oil in the United States was around USD 9.1 billion in 2020, according to a market research report by Statista. The market is predicted to grow at a CAGR of 3.9% between 2023 and 2030, spurred by the rise in consumer demand for natural and healthier cooking oils.

The growing demand for healthy cooking options is one of the major factors driving the US cooking and salad oil industry. Olive oil, avocado oil, and coconut oil are among the healthier and more natural cooking oils that consumers are choosing as they become more health conscious. The demand for healthier cooking oils is projected to increase as the trend toward healthy eating habits and lifestyles persists. Also fueling the market's expansion is the usage of salad oils in catering and foodservice.

The rising demand for premium and organic cooking and salad oils is another market-driving trend. Customers are prepared to spend extra for high-end, organic goods because they believe they are better-made and healthier. Yet, the market is also confronted with issues such as raw material price instability, which can have an influence on the profitability of producers and retailers. Furthermore, rising competition from alternative cooking goods such as cooking sprays is posing a challenge to the cooking and salad oil sector.

Overall, the cooking and salad oil market in the United States is likely to expand in the future years, driven by rising demand for healthier and more natural cooking options. The market is predicted to become increasingly competitive, and producers ought to focus on innovation and differentiation to stay competitive.

3.3.1 Cooking and salad oil is a product used in a range of cooking procedures, including sautéing, frying, baking, and roasting, as well as salad dressings and marinades. It's usually prepared from a blend of vegetable oils like soybean oil, canola oil, or sunflower oil. The term "vegetable oil" or "cooking oil" may be used to describe cooking and salad oil, which is frequently marketed in liquid form in bottles or jugs. It is also a good source of healthy fats, such as polyunsaturated and monounsaturated fats, which are beneficial for heart health.



4. Data Exploratory using Tableau

Tableau is an effective tool for data visualization that can be used to explore and evaluate data visually.

Tableau can be used for a variety of specific data exploration activities, including as finding trends and outliers in the data, comparing data from several categories or time periods, and investigating relationships between variables. Tableau aids in discovering new information about the data set and improving the decision-making using its robust visualization and analysis features.

4.1 Trends Observed in the Data

4.1.1 Cooking and Salad Oil:

From the data, it is evident that the East region is where the Cooking Oil sales are highly concentrated, with the Northeast followed by the Southeast. On close observation, the year-on-year sales increase has been highest during 2020, followed by a 19% increase in 2022 in the Northeast. However, 2 regions, the Southeast and the Midsouth come out as potential markets as they have registered a 40% increase in their average consumption since 2018. Refer Appendix 7.1

The most favorite brand measured using the total sales in Dollars is MAZOLA and CRISCO. It appears from the data that the favorite brand in the Southeast is CRISCO followed by WESSON and MAZOLA. In the Northeast, WESSON, and MAZOLA. A few brands have made a significant increase in year-on-year sales and VICTORY brand has experienced a noticeable increase in comparison with the top brands. More details in Appendix 7.2

CONAGRA's SMART BALANCE Brand ranks 9th in Market share based on the Total Volume of Cooking and Salad Oil Consumption and ranks 14th in terms of Total Dollar Sales made under this category. Therefore, it appears that CONAGRA ranks lower in terms of price per volume of Cooking Oil than its competitor. However, on close observation, it is evident that indeed the price is comparable and little bit higher than the favorite brands. CONAGRA's SMART BALANCE's average sales in 2022 is higher in Southeast followed by Midsouth and Northeast – all 3 are markets where the demand seems to be increasing year on year. Appendix 7.3 details the trends.

The Incremental Sales CONAGRA has during promotion is not in par with rest of the favorite brands. While LOU ANNA's incremental sales is 25% more than the Base sales, CONAGRA'S sales is only 2% higher. CONAGRA's SMART BALANCE has price and sales trend is in line with most of the top brands when it comes to Price/Sales during Any Merch versus No Merch.

4.1.2 Cooking Sprays:

Brands owned by Conagra: NATURALLY, PAM, SMART BALANCE, WESCOAT.



Based on the Sales data, it is evident that the favorite cooking spray brand is PAM COOKING SPRAYS, owned by Conagra, and enjoys a clear monopoly in this market. From the graph (APPENDIX 7.4), from 2018 to 2023, PAM dominates the category in terms of base dollar sales, followed by the PRIVATE LABEL COOKING SPRAYS, BAKERS JOY, CRISCO, and POMPEIAN. The rest of the brands have negligible sales. Overall, this category sees most of its sales from PAM COOKING SPRAYS AND PRIVATE LABEL COOKING SPRAYS.

Next, we look at the trends for this category over the given period (APPENDIX 7.5). The base dollar and unit sales remain stagnant over 2018-2019. This product category sees the highest jump with a growth of 21% in the year 2020 and then again starts to become stagnant with a bit of growth until 2022. Another trend to notice is that the overall base dollar sales of PAM are the highest in this category, with PRIVATE LABLED following the next. But the unit sales of PRIVATE LABELD are the highest, and this difference in the base unit sales can be explained by the base unit cost of PAM, which is 4\$ while the PRIVATE LABLED COOKING SPRAYS, have an average of \$2.45.

It is evident that the East region is where the Cooking Spray sales are highly concentrated, with the Northeast followed by the Southeast. On close observation, the year-on-year sales of the Southeast region have seen the highest growth from 2020 to 2022 .Sales in the regions of Northeast, California, and Plains decreased when compared with 2020 and 2022. Refer Appendix 7.6. We also see that compared to the performance of cooking sprays in the region are not consistent with that of the table spreads.

4.1.3 Table Spreads:

After analyzing the sales data, it is evident that the Northeast Region holds significant potential for the Table Spread category across all brands. With a 20.27% contribution to No Merch dollar sales and a 21.73% contribution to Any Merch dollar sales, Northeast ranks as the top region for these categories. The incremental dollar sales to incremental unit sales and incremental volume sales ratios for Northeast also top the charts, indicating that for every incremental unit or volume sold, we gain \$3.28 and \$3.36 as incremental dollar sales, respectively. It is important to note that while California may have better metrics than the Northeast region (for ratios), we have excluded it from our analysis as its market size in terms of absolute sales is lower. In contrast, the Northeast region has significantly higher sales, making it a better market to focus on for our analysis.

This data can be leveraged to formulate effective merchandising strategies that boost sales for the Table Spread category. For instance, a buy one get one offer can be introduced if the dollar sales to unit ratio is better, whereas a King Size pack can be offered if the ratio of dollar sales to volume is higher. Thus, merchandising activities in the Northeast region can prove to be highly beneficial for all brands in the Table Spread category.

However, while Northeast ranks as the top region for the Table Spread category, it is the Southeast region that is the top-performing region for Conagra Brands. In terms of incremental sales, Northeast ranks second for Conagra Brands with a 16.31% contribution to No Merch dollar sales and an 18.90% contribution to Any Merch dollar sales. This highlights the potential for improvement in sales in the Northeast region for Conagra Brands.



Further analysis of the sales data for Conagra Brands reveals that the BLUE BONNET RFG VEGETABLE OIL SPREAD BOX SPREAD 16 OZ - 0029000008222 product dominates the sales charts. However, most of the sales for this product come from the Southeast region, with the Northeast region contributing to just 6.74% of No Merch Sales and 9.58% of Any Merch Sales for Conagra Brands. This is primarily because two other products, SMART BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0033776011001 and SMART BALANCE RFG ORIGINAL VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 45 OZ - 0033776011601, contribute more to the No Merch and Any Merch sales for Conagra Brands.

Based on this analysis, we can hypothesize that running merchandising activities specifically for the BLUE BONNET RFG VEGETABLE OIL SPREAD BOX SPREAD 16 OZ - 0029000008222 product in the Northeast region can improve sales for Conagra Table Spreads. This can be achieved by tailoring merchandising strategies to the Northeast market's demands and preferences, increasing brand awareness, and highlighting the unique features and benefits of the BLUE BONNET product. Such a focused approach can help Conagra Brands capture a larger market share and boost overall sales in the Northeast region where the current Market Share for Conagra Brands in the Northeast region is just 7.89% for the Table spread category.

After analyzing the sales growth data of our competitors, it is evident that certain products have performed exceptionally well in terms of sales growth. Specifically, the CABOT RFG BUTTER PLASTIC WRAPPED BLOCK 16 OZ - 0078354636372 product has displayed an impressive average growth rate of 718% for no merchandise sales. This growth rate has remained positive from 2018 to 2022, with the exception of the COVID pandemic year of 2021. Additionally, the KERRYGOLD RFG IRISH BUTTER INDIVIDUAL WRAP IN BOX STICK 8 OZ - 0767707012331 product has also shown steady growth with an average no merchandise sales growth rate of 388% over the years.

In terms of any merchandise sales, the VERMONT RFG BUTTER INDIVIDUAL WRAP IN BOX STICK 8 OZ - 0011826750111 and VERMONT RFG BUTTER INDIVIDUAL WRAP IN BOX STICK 8 OZ - 0011826750011 products from VERMONT have been the top performers with impressive average growth rates of 4697% and 4344% respectively.

However, it is important to note that the CABOT RFG BUTTER PLASTIC WRAPPED BLOCK 16 OZ - 0078354636372 product has also demonstrated significant growth in any merchandise dollar sales with an average growth rate of 1231%. Furthermore, the product displayed a positive growth rate of 80% in the year 2022.

By adopting the successful strategies implemented by these products, we can achieve comparable growth rates in the market. Please refer Appendix 7.7 for graphical representation of these trends.



5. Proposal for Conagra from Given Data Set

As per the given dataset, below are the proposals that we intend to perform for Conagra in the next project implementation phase.

1. IRI_POS_Tablespreads_2019 IRI_POS_Cooking Sprays_2018-2022:

- Forecasting future Sales Volume:
 - Given the historical sales data of Conagra's table spreads products, we can build a model to predict future sales volume or revenue. This will help Conagra to plan production, inventory, and supply chain management.
- Price optimization:
 - We can model the relationship between product pricing and sales volume and try to find the optimal price point that maximizes revenue or profitability. This will help Conagra to adjust their pricing strategy to gain more competitive advantage and be profitable.
- Identifying sales trends:
 - We can analyze the sales data to identify trends in consumer demand, such as which products are increasing or decreasing in popularity, and whether there are seasonal patterns in sales. This will help Conagra to optimize their product portfolio and marketing strategies.

2. IRI_POS_Tablespreads_Product Attribute File, IRI_POS_Cooking Spray_Product Attribute File, IRI_POS_Cooking & Salad Oils_Product Attribute File:

- Product performance analysis:
 - We can use the dataset to identify which product attributes are associated with high or low sales volume and revenue and try to understand the factors that contribute to their success or failure. This will help Conagra to optimize their product portfolio and marketing strategies.
- Consumer preference analysis:
 - We can analyze the relationship between product attributes and consumer preferences, such as which attributes are most important to consumers when purchasing table spreads products. This will help Conagra to better understand their target audience and design products that meet their needs.

3. IRI_POS_Cooking & Salad Oils_2018-2022:

- Customer Segmentation:
 - Identify customer segments that are more likely to purchase cooking and salad oils, based on geographical data. This will help with targeted marketing and product recommendations.
- Market Share:



- Predict the market share of cooking and salad oil products for future time periods, based on historical sales data and competitor information. This will help with market positioning and competitive analysis.
- Product Performance:
 - Identify which cooking and salad oil products are performing well in terms of sales volume and revenue. This will help with product development and marketing strategies.

4. IRI_Panel_HH Buying:

- Purchase frequency:
 - Predict how often households purchase different types of products. This will help with inventory and production planning for manufacturers and retailers.
- Purchase amount:
 - Predict the amount of products households purchase in each transaction. This will help with pricing and promotion strategies.
- Brand loyalty:
 - Identify which brands households tend to purchase for each product category. This will help with brand management and marketing strategies.

5. IRI_Panel_Buyer Distribution and Index:

- Buyer behavior through demographic trends:
 - Analyze the purchasing behavior of different types of HH Demo Summary (such as race, age, gender, income level, and household size etc.) for Conagra's products. This will help with targeted marketing and promotion strategies. Additionally assist Conagra to identify target audiences and tailor the market positioning messages.
- Product preferences:
 - Predict which Conagra products are more likely to be purchased by different types of buyers, based on purchase history data. This will help with product development and marketing strategies.
- Geographic distribution:
 - Analyze the geographic distribution of Conagra's product sales, and identify which regions or markets have the highest and lowest sales volumes. This will help with identifying growth opportunities and optimizing distribution strategies.



6. References

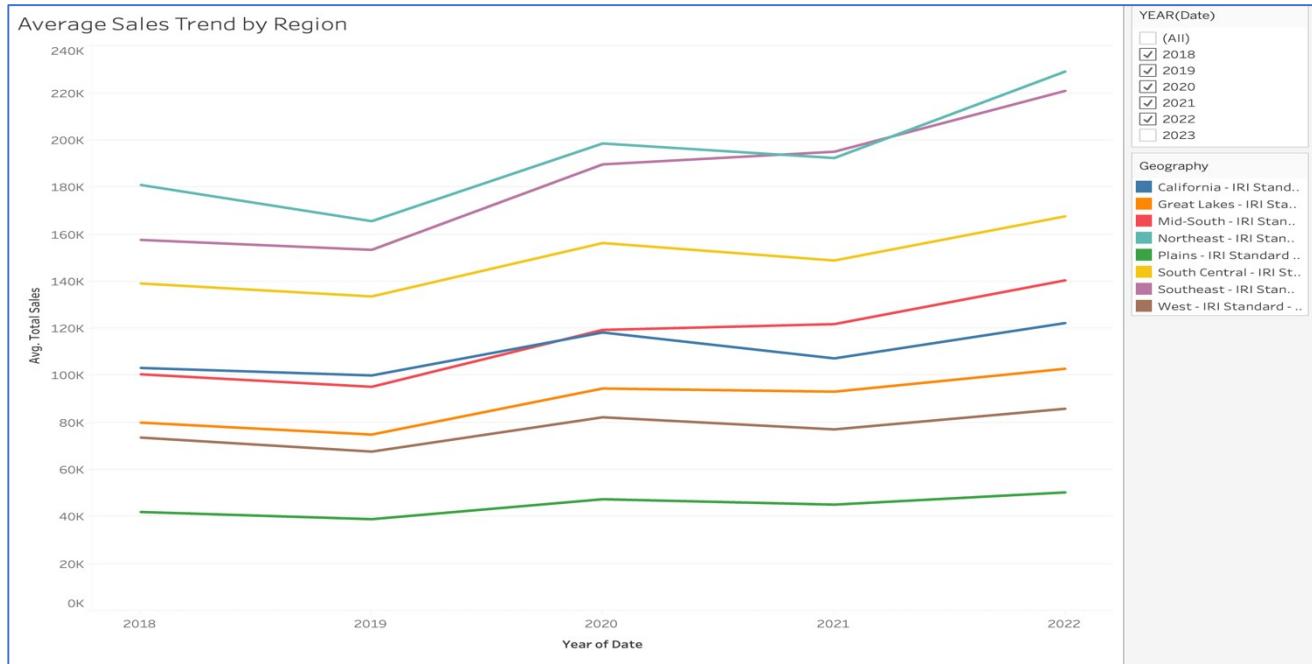
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4. [https://www.statista.com/outlook/cmo/food/oils-fats/margarine/united-states#:~:text=Revenue%20in%20the%20Margarine%20segment,US%245%2C426.00m%20in%202023\).](https://www.statista.com/outlook/cmo/food/oils-fats/margarine/united-states#:~:text=Revenue%20in%20the%20Margarine%20segment,US%245%2C426.00m%20in%202023).)
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7. Appendix

This section consists of all the graphical representations of the trends observed in the dataset and discussed in chapter 4 of this report.

7.1 Reference Section 1

The below graph depicts Average Sales per Region across 2018-2022



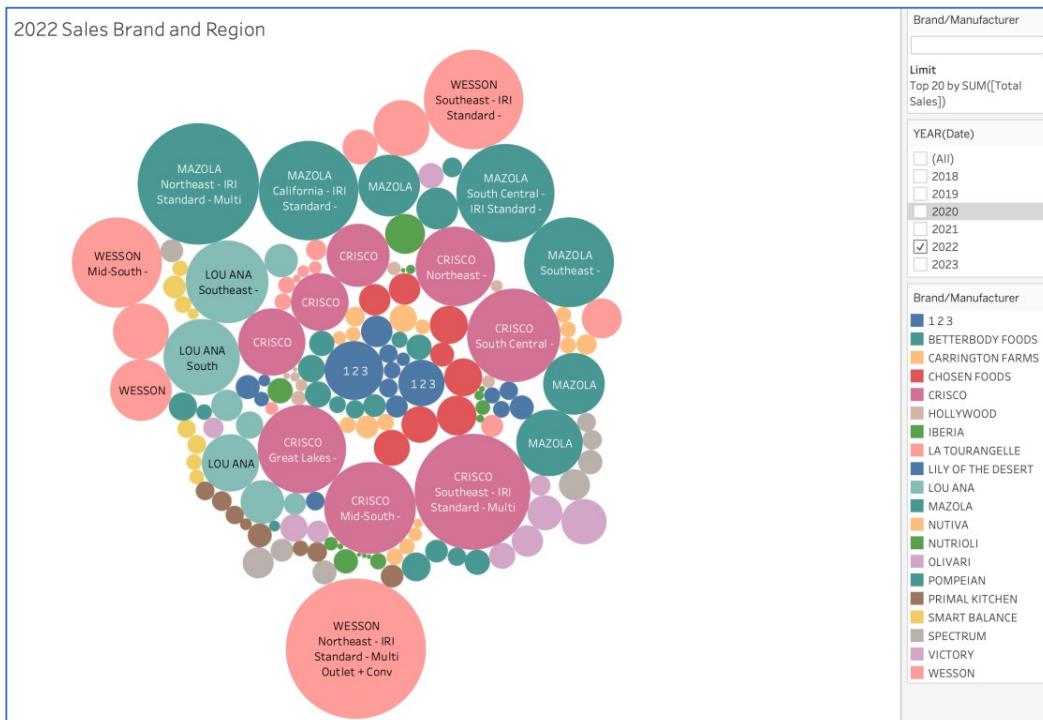
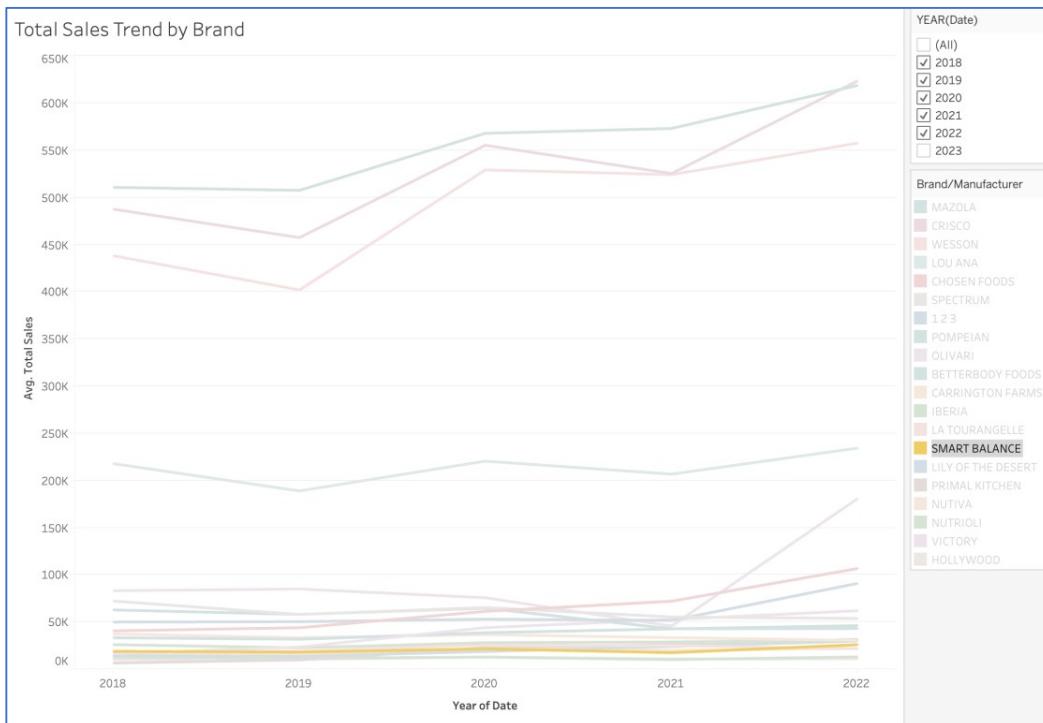
Region	Year	% Inc 2018-2022
Southeast - IRI Standard - Multi Outlet + Conv	2022	40%
Mid-South - IRI Standard - Multi Outlet + Conv	2022	40%
Great Lakes - IRI Standard - Multi Outlet + Conv	2022	29%
Northeast - IRI Standard - Multi Outlet + Conv	2022	27%
South Central - IRI Standard - Multi Outlet + Conv	2022	21%
Plains - IRI Standard - Multi Outlet + Conv	2022	20%
California - IRI Standard - Multi Outlet + Conv	2022	18%
West - IRI Standard - Multi Outlet + Conv	2022	17%

Region	Year	YoY % Inc
Great Lakes - IRI Standard - Multi Outlet + Conv	2020	26%

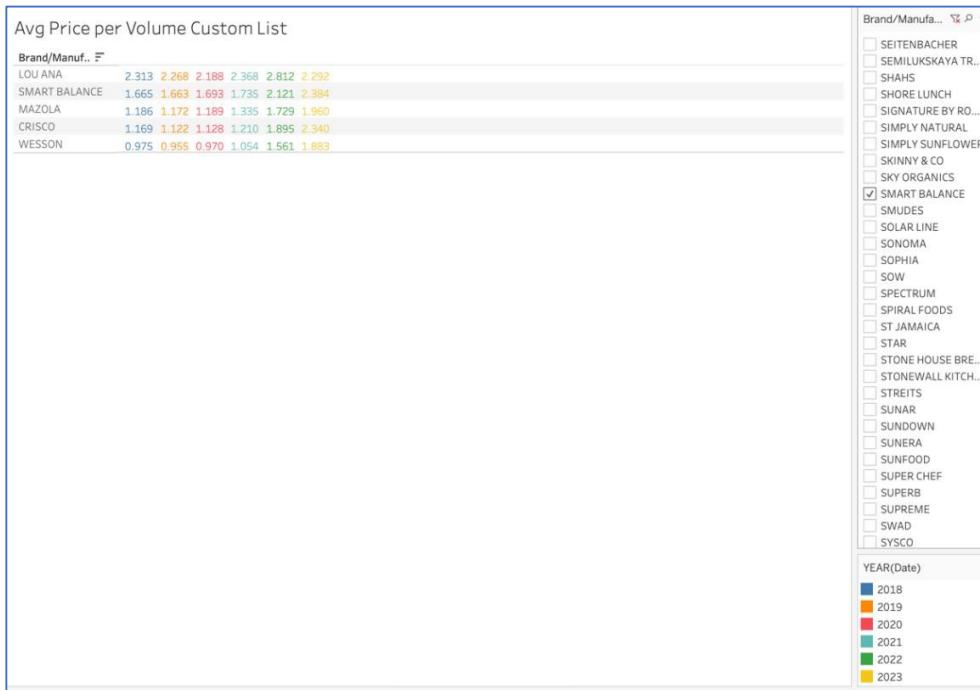
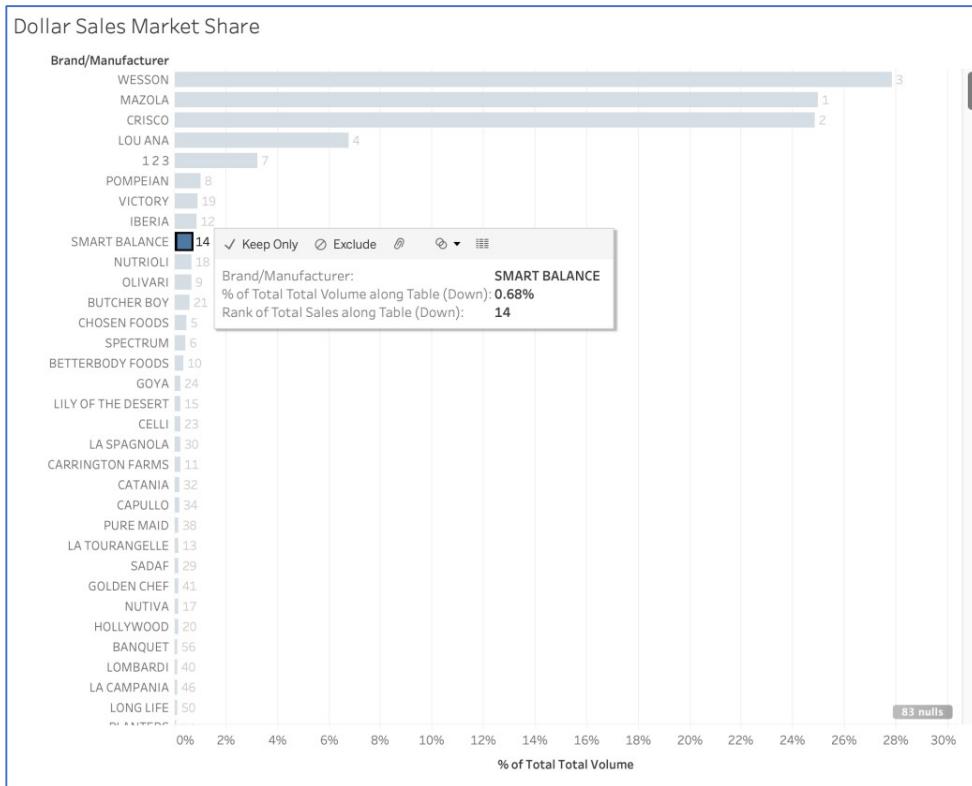


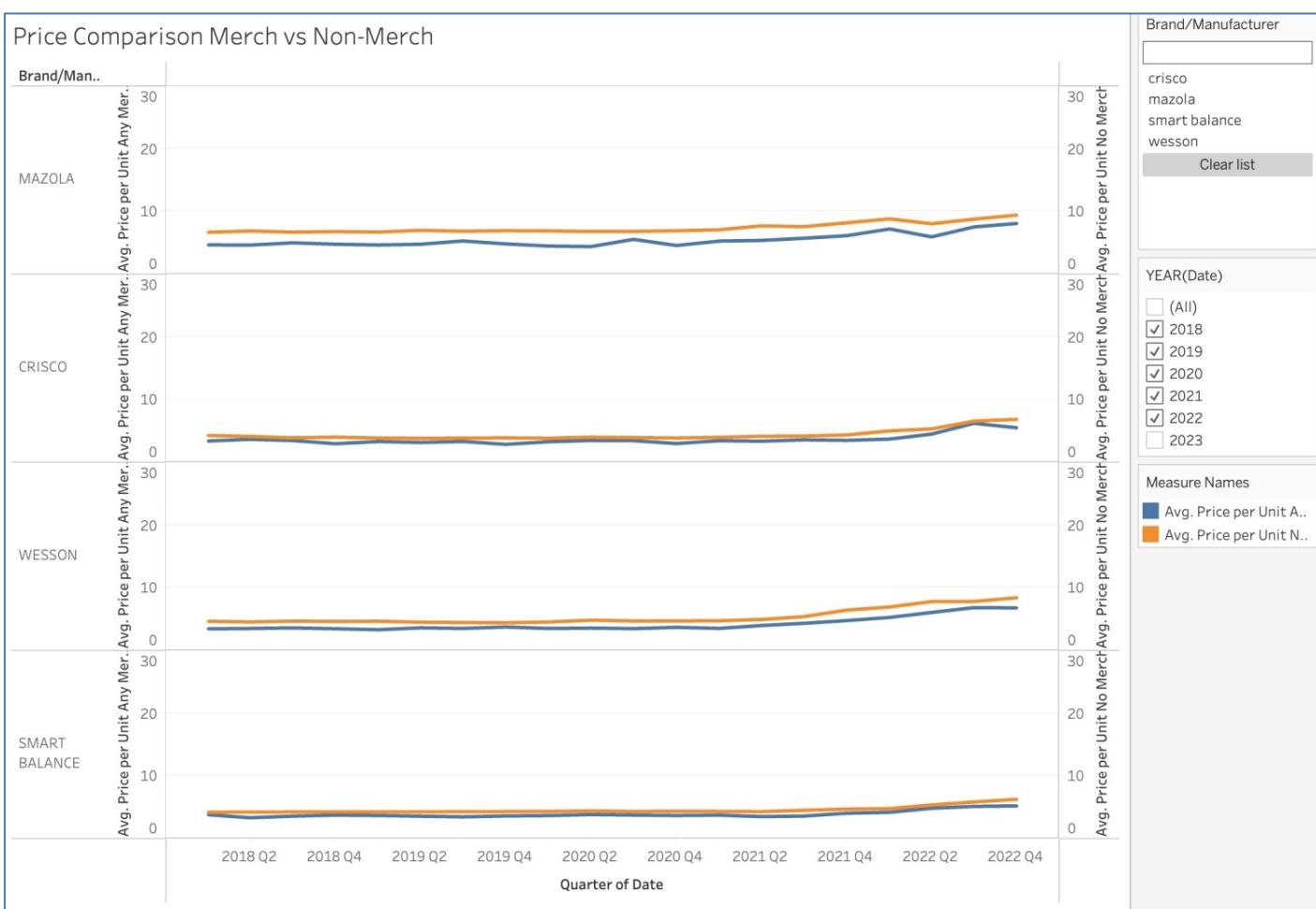
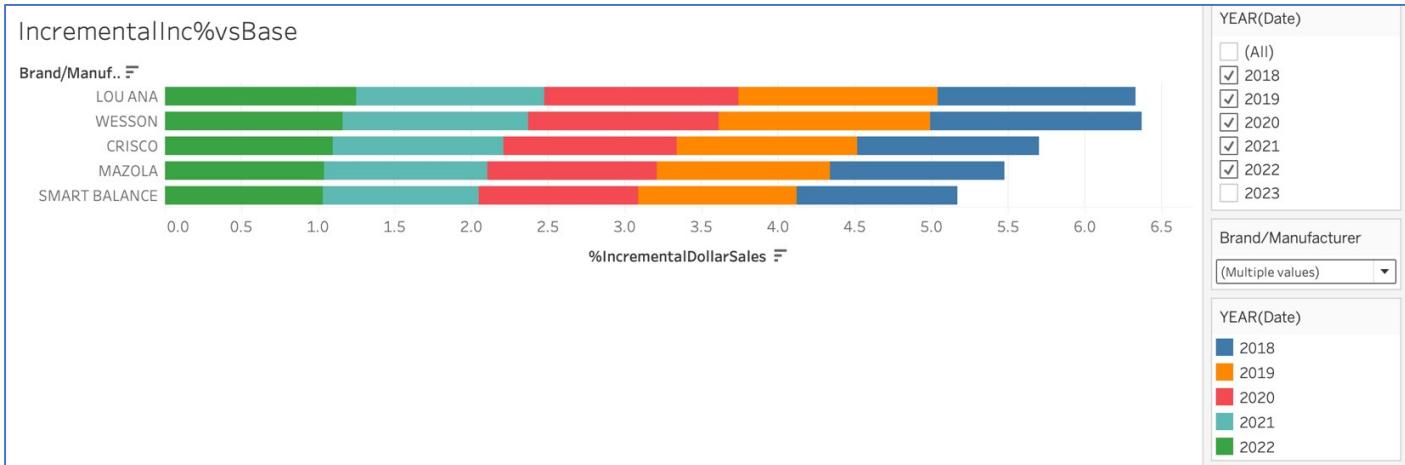
Mid-South - IRI Standard - Multi Outlet + Conv	2020	25%
Southeast - IRI Standard - Multi Outlet + Conv	2020	24%
Plains - IRI Standard - Multi Outlet + Conv	2020	22%
West - IRI Standard - Multi Outlet + Conv	2020	22%
Northeast - IRI Standard - Multi Outlet + Conv	2020	20%
Northeast - IRI Standard - Multi Outlet + Conv	2022	19%
California - IRI Standard - Multi Outlet + Conv	2020	18%
South Central - IRI Standard - Multi Outlet + Conv	2020	17%
Mid-South - IRI Standard - Multi Outlet + Conv	2022	15%
California - IRI Standard - Multi Outlet + Conv	2022	14%
Southeast - IRI Standard - Multi Outlet + Conv	2022	13%
South Central - IRI Standard - Multi Outlet + Conv	2022	13%
Plains - IRI Standard - Multi Outlet + Conv	2022	12%
West - IRI Standard - Multi Outlet + Conv	2022	11%
Great Lakes - IRI Standard - Multi Outlet + Conv	2022	10%
Southeast - IRI Standard - Multi Outlet + Conv	2021	3%
Mid-South - IRI Standard - Multi Outlet + Conv	2021	2%
Great Lakes - IRI Standard - Multi Outlet + Conv	2021	-1%
Southeast - IRI Standard - Multi Outlet + Conv	2019	-3%
California - IRI Standard - Multi Outlet + Conv	2019	-3%
Northeast - IRI Standard - Multi Outlet + Conv	2021	-3%
South Central - IRI Standard - Multi Outlet + Conv	2019	-4%
South Central - IRI Standard - Multi Outlet + Conv	2021	-5%
Plains - IRI Standard - Multi Outlet + Conv	2021	-5%
Mid-South - IRI Standard - Multi Outlet + Conv	2019	-5%
West - IRI Standard - Multi Outlet + Conv	2021	-6%
Great Lakes - IRI Standard - Multi Outlet + Conv	2019	-6%
Plains - IRI Standard - Multi Outlet + Conv	2019	-7%
West - IRI Standard - Multi Outlet + Conv	2019	-8%
Northeast - IRI Standard - Multi Outlet + Conv	2019	-8%
California - IRI Standard - Multi Outlet + Conv	2021	-9%

7.2 Reference Section 2

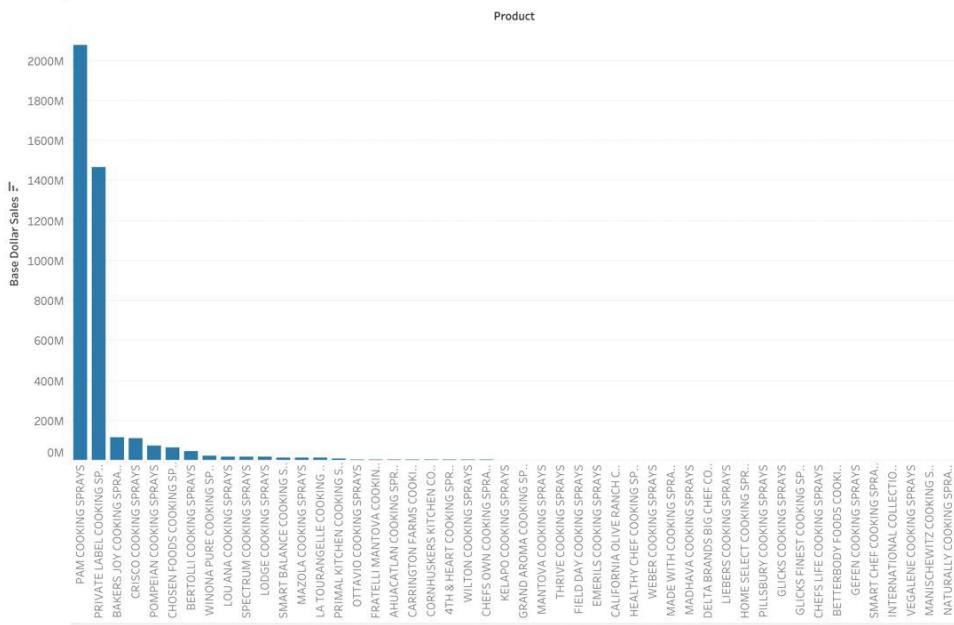


7.3 Reference Section 3

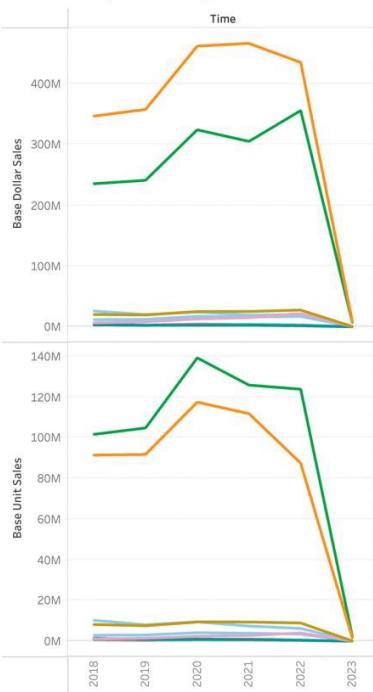
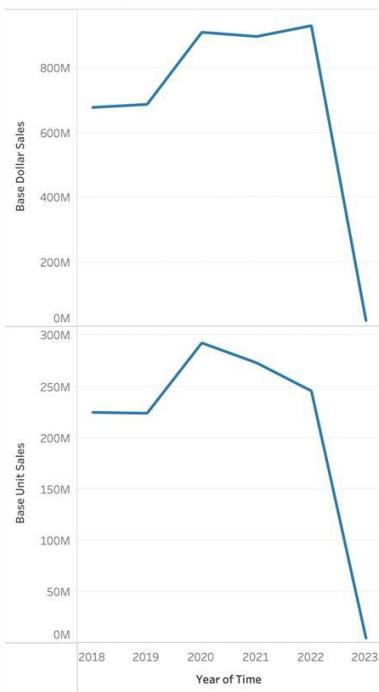




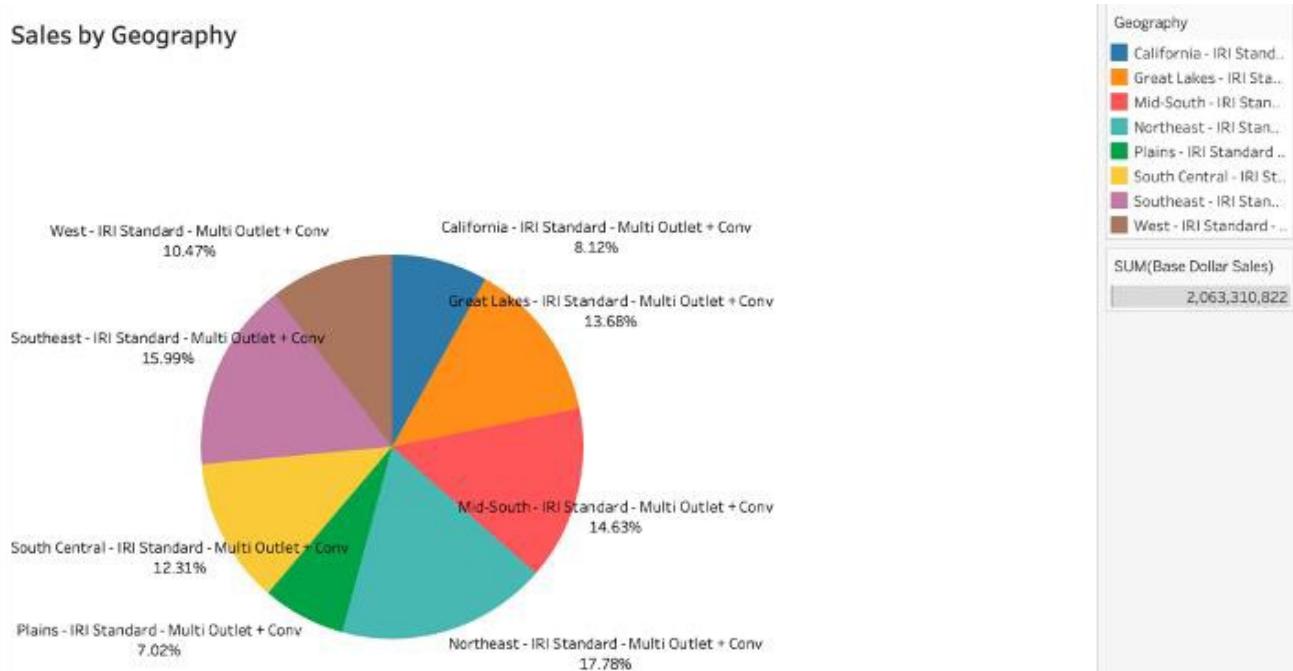
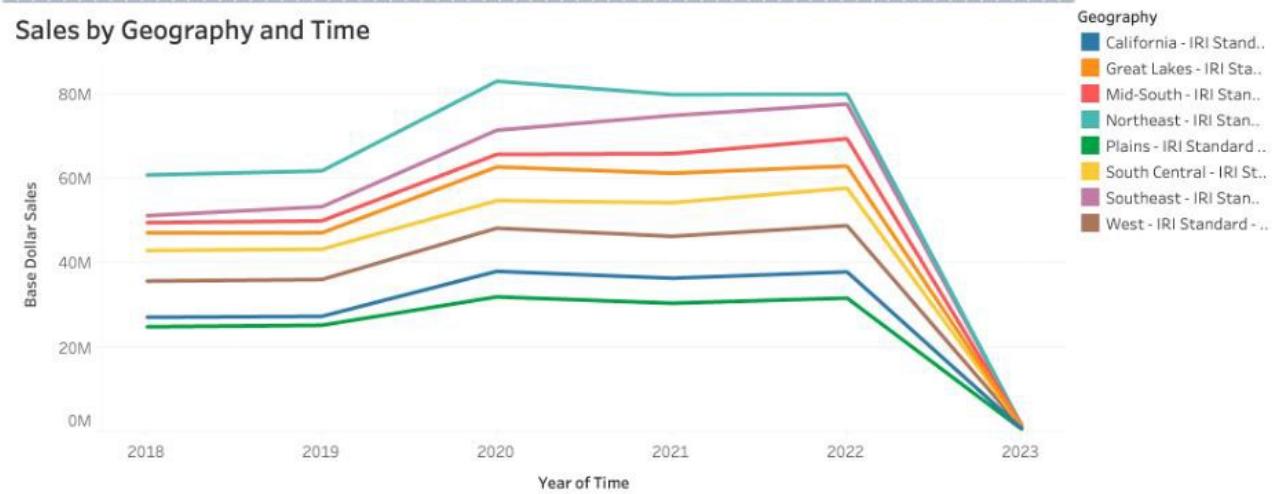
7.4 Reference Section 4

Sales by Product


7.5 Reference Section 5

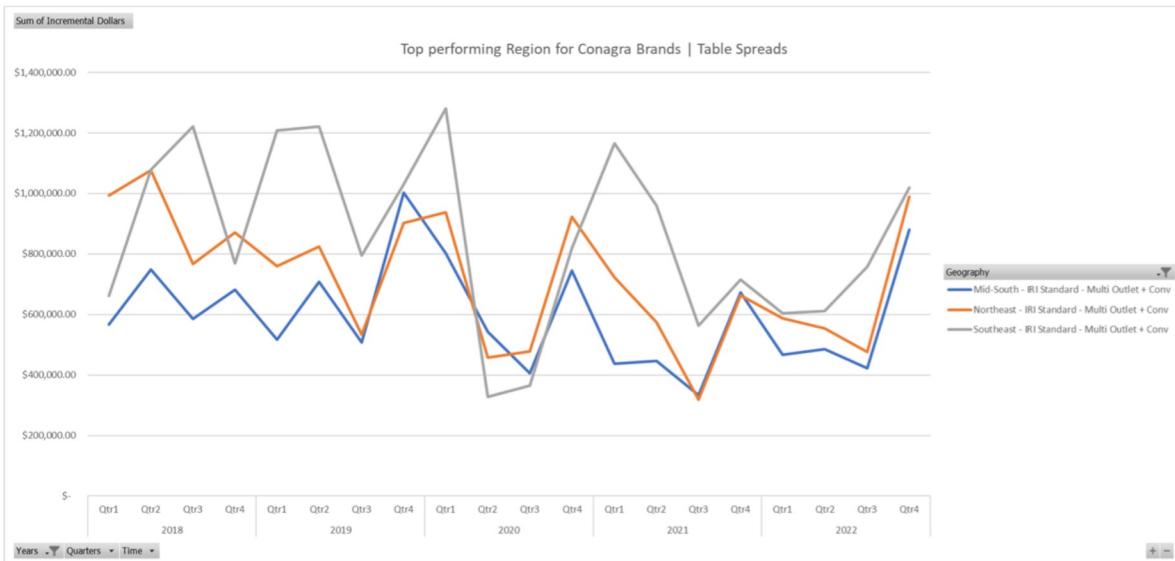
Sales for Top Brands by Time

Total Sales by Time


7.6 Reference Section 6

Sales by Geography

Sales by Geography and Time




PREDICTIVE ANALYTICS PROJECT - BUAN 6337.501



Regions Table Spreads	Sum of Dollar Sales No Merch	Sum of Dollar Sales Any Merch
Northeast - IRI Standard - Multi Outlet + Conv	20.27%	21.73%
Great Lakes - IRI Standard - Multi Outlet + Conv	13.66%	17.51%
Southeast - IRI Standard - Multi Outlet + Conv	15.76%	11.95%
Mid-South - IRI Standard - Multi Outlet + Conv	13.08%	11.11%
West - IRI Standard - Multi Outlet + Conv	10.07%	13.88%
South Central - IRI Standard - Multi Outlet + Conv	11.13%	6.61%
California - IRI Standard - Multi Outlet + Conv	9.37%	9.24%
Plains - IRI Standard - Multi Outlet + Conv	6.66%	7.98%

Regions Conagra Brands	Sum of Dollar Sales No Merch	Sum of Dollar Sales Any Merch
Southeast - IRI Standard - Multi Outlet + Conv	19.45%	19.01%
Mid-South - IRI Standard - Multi Outlet + Conv	17.65%	17.16%
Northeast - IRI Standard - Multi Outlet + Conv	16.31%	18.90%
South Central - IRI Standard - Multi Outlet + Conv	13.25%	11.46%
Great Lakes - IRI Standard - Multi Outlet + Conv	12.39%	14.62%
West - IRI Standard - Multi Outlet + Conv	7.71%	5.89%
Plains - IRI Standard - Multi Outlet + Conv	6.86%	7.28%
California - IRI Standard - Multi Outlet + Conv	6.38%	5.69%

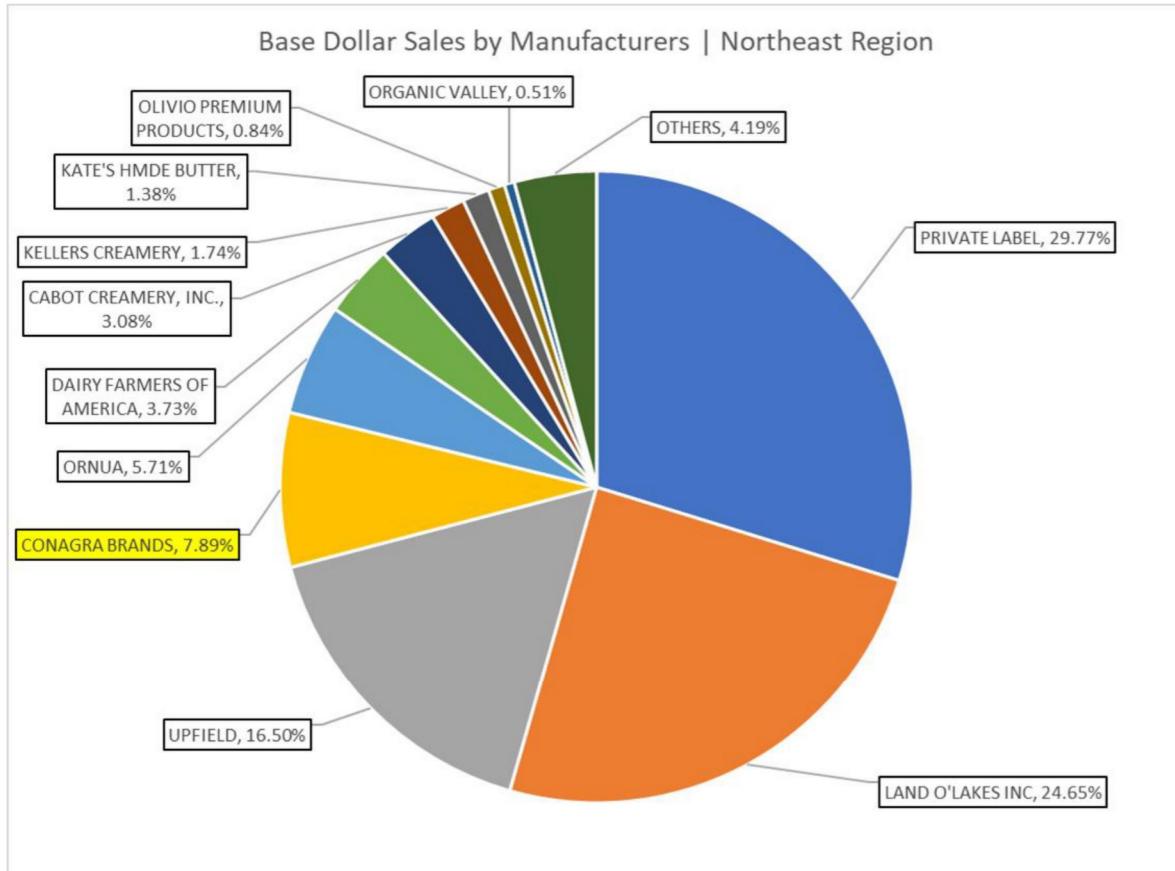


PREDICTIVE ANALYTICS PROJECT - BUAN 6337.501

Products All Regions	Sum of Dollar Sales No Merch	Sum of Dollar Sales Any Merch
BLUE BONNET RFG VEGETABLE OIL SPREAD BOX SPREAD 16 OZ - 0029000008222	18.26%	22.37%
BLUE BONNET RFG VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 45 OZ - 0027000009331	9.29%	11.87%
SMART BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0033776011001	8.71%	9.66%
SMART BALANCE RFG ORIGINAL VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 45 OZ - 0033776011601	8.22%	3.08%
EARTH BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 13 OZ - 0033776011711	5.14%	4.33%
PARKAY RFG VEGETABLE OIL SPREAD PLASTIC SQUEEZE BTL SQUEEZE 12 OZ - 0029000651502	5.26%	3.40%
EARTH BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0033776011701	4.93%	4.52%
SMART BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 13 OZ - 0033776011301	4.68%	5.65%
BLUE BONNET RFG VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0027000009002	4.77%	3.78%
EARTH BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0033776011891	4.09%	3.52%

Region BLUE BONNET RFG VEGETABLE OIL SPREAD BOX SPREAD 16 OZ - 0029000008222	Sum of Unit Sales No Merch	Sum of Unit Sales Any Merch
Southeast - IRI Standard - Multi Outlet + Conv	25.22%	21.47%
Mid-South - IRI Standard - Multi Outlet + Conv	24.89%	24.38%
South Central - IRI Standard - Multi Outlet + Conv	14.71%	15.15%
Great Lakes - IRI Standard - Multi Outlet + Conv	12.60%	14.43%
Plains - IRI Standard - Multi Outlet + Conv	8.08%	11.18%
Northeast - IRI Standard - Multi Outlet + Conv	6.74%	9.58%
West - IRI Standard - Multi Outlet + Conv	5.27%	2.73%
California - IRI Standard - Multi Outlet + Conv	2.48%	1.09%

Products Northeast - IRI Standard - Multi Outlet + Conv	Sum of Dollar Sales No Merch	Sum of Dollar Sales Any Merch
SMART BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0033776011001	13.10%	12.19%
SMART BALANCE RFG ORIGINAL VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 45 OZ - 0033776011601	10.35%	4.48%
BLUE BONNET RFG VEGETABLE OIL SPREAD BOX SPREAD 16 OZ - 0029000008222	8.49%	11.87%
EARTH BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 13 OZ - 0033776011711	7.55%	4.01%
EARTH BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0033776011701	7.07%	3.41%
BLUE BONNET RFG VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 45 OZ - 0027000009331	5.88%	7.15%
EARTH BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 15 OZ - 0033776011891	6.26%	2.60%
SMART BALANCE RFG BUTTERY VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 13 OZ - 0033776011301	5.48%	5.76%



UPC 13 digit	Product	CAG Major Brand Val	Dollar_no_merch_2018_to_2019	Dollar_no_merch_2019_to_2020	Dollar_no_merch_2020_to_2021	Dollar_no_merch_2021_to_2022	Average Rate of growth
001826750111	VERMONT RFG BUTTER INDIVD. WRAP IN BOX STICK 8 OZ - 0011826750111	VERMONT	18683%	-94%	-8582%	-40%	-71.8%
0078354636372	CABOT RFG BUTTER PLASTIC WRAPPED BLOCK 16 OZ - 0078354636372	CABOT	337%	261%	-43%	-17%	44.7%
0079176093551	GRASSLAND RFG BUTTER BLEND PLASTIC TUB SPREAD 8 OZ - 0079176093551	GRASSLAND	1851%	7%	-43%	-27%	348%
0767707012331	KERRYGOLD RFG IRISH BUTTER INDIVD. WRAP IN BOX STICK 8 OZ - 0767707012331	KERRYGOLD	351%	76.2%	66%	371%	388%
004615881141	JOHN F MARTIN RFG SWEET CREAM BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 004615881141	JOHN F MARTIN	-90%	1365%	-69%	-15%	298%
0011826750111	VERMONT RFG BUTTER INDIVD. WRAP IN BOX STICK 8 OZ - 0011826750111	VERMONT	935%	105%	-7%	21%	263%
0011826750011	VERMONT RFG BUTTER INDIVD. WRAP IN BOX STICK 8 OZ - 0011826750011	VERMONT	669%	12.2%	-10%	27%	202%
004615881091	JOHN F MARTIN RFG SWEET CREAM BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 004615881091	JOHN F MARTIN	-78%	78.2%	-23%	17%	175%
0633016702025	B GAN RFG MARGARINE WAX PAPER WRAPPED SPREAD 16 OZ - 0633016702025	B GAN	312%	-50%	390%	34%	17.2%
0079176002201	GRASSLAND RFG BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 0079176002201	GRASSLAND	368%	154%	-40%	135%	154%
0641548121741	CHEF SHAMY GOURMET RFG GARLIC & HERB FINISHING BUTTER PLASTIC TUB SPREAD 3.5 OZ - 0641548121741	CHEF SHAMY GOURMET	306%	51%	61%	166%	146%
0079176002001	GRASSLAND RFG BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 0079176002001	GRASSLAND	314%	57%	-41%	167%	124%
085832005041	LES PRES SALES RFG BUTTER WAX PAPER WRAPPED BLOCK 8.8 OZ - 085832005041	LES PRES SALES	379%	60%	27%	27%	12.3%
0033776012801	SMART BALANCE RFG BUTTER VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 64 OZ - 0033776012801	SMART BALANCE	-45%	48%	288%	119%	10.3%

UPC 13 digit	Product	CAG Major Brand Value	Dollar_any_merch_2018_to_2019	Dollar_any_merch_2019_to_2020	Dollar_any_merch_2020_to_2021	Dollar_any_merch_2021_to_2022	Average Rate of growth
0011826750111	VERMONT RFG BUTTER INDIVD. WRAP IN BOX STICK 8 OZ - 0011826750111	VERMONT	18683%	103%	13%	-13%	-46.97%
0011826750011	VERMONT RFG BUTTER INDIVD. WRAP IN BOX STICK 8 OZ - 0011826750011	VERMONT	17274%	107%	0%	-6%	4344%
0633016702025	B GAN RFG MARGARINE WAX PAPER WRAPPED SPREAD 16 OZ - 0633016702025	B GAN	3379%	-93%	5433%	-82%	2159%
0078354636372	CABOT RFG BUTTER PLASTER WRAPPED BLOCK 16 OZ - 0078354636372	CABOT	822%	4121%	-99%	80%	1231%
0079176093551	GRASSLAND RFG BUTTER BLEND PLASTIC TUB SPREAD 8 OZ - 0079176093551	GRASSLAND	1816%	58%	-69%	30%	459%
0079176002201	GRASSLAND RFG BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 0079176002201	GRASSLAND	1574%	76%	-33%	56%	418%
0034500152142	LAND O LAKES RFG PUMPKIN PIE SPICE BUTTER BOX SPREAD 6.5 OZ - 0034500152142	LAND O LAKES	2%	-87%	1306%	-18%	301%
0079176002001	GRASSLAND RFG BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 0079176002001	GRASSLAND	1120%	58%	-43%	64%	300%
0767707012331	KERRYGOLD RFG IRISH BUTTER INDIVD. WRAP IN BOX STICK 8 OZ - 0767707012331	KERRYGOLD	129%	29%	153%	447%	257%
004615881091	JOHN F MARTIN RFG SWEET CREAM BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 004615881091	JOHN F MARTIN	-82%	1100%	-57%	-77%	221%
085832005041	LES PRES SALES RFG BUTTER WAX PAPER WRAPPED BLOCK 8.8 OZ - 085832005041	LES PRES SALES	103%	85%	3%	587%	195%
0033776012801	SMART BALANCE RFG BUTTER VEGETABLE OIL SPREAD PLASTIC TUB SPREAD 64 OZ - 0033776012801	SMART BALANCE	314%	259%	54%	53%	170%
0641548121741	CHEF SHAMY GOURMET RFG GARLIC & HERB FINISHING BUTTER PLASTIC TUB SPREAD 3.5 OZ - 0641548121741	CHEF SHAMY GOURMET	75%	20%	301%	125%	131%
004615881141	JOHN F MARTIN RFG SWEET CREAM BUTTER INDIVD. WRAP IN BOX QUARTER 16 OZ - 004615881141	JOHN F MARTIN	-75%	463%	-11%	24%	100%