CFI Tableau Case Study-Calwest E-Commerce

Project Description: Calwest E-Commerce is a company that sells health-conscious products for people and their pets. Working as a data visualization analyst provide two dashboards that will summarize high level company data and regional performance.

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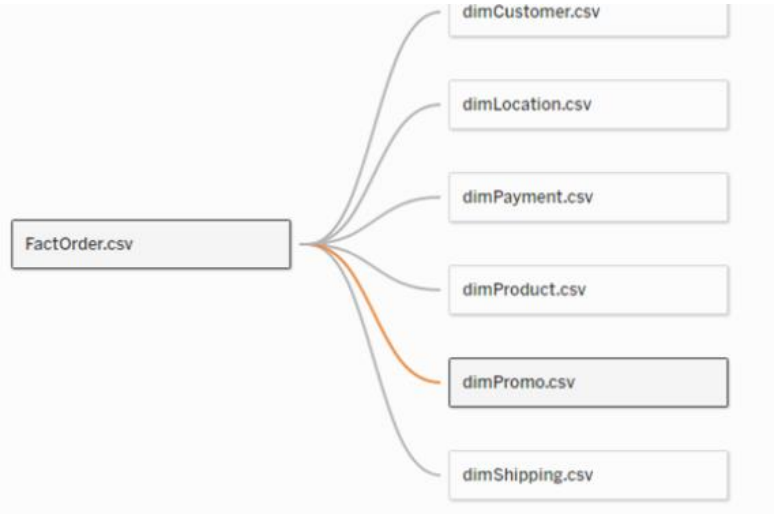
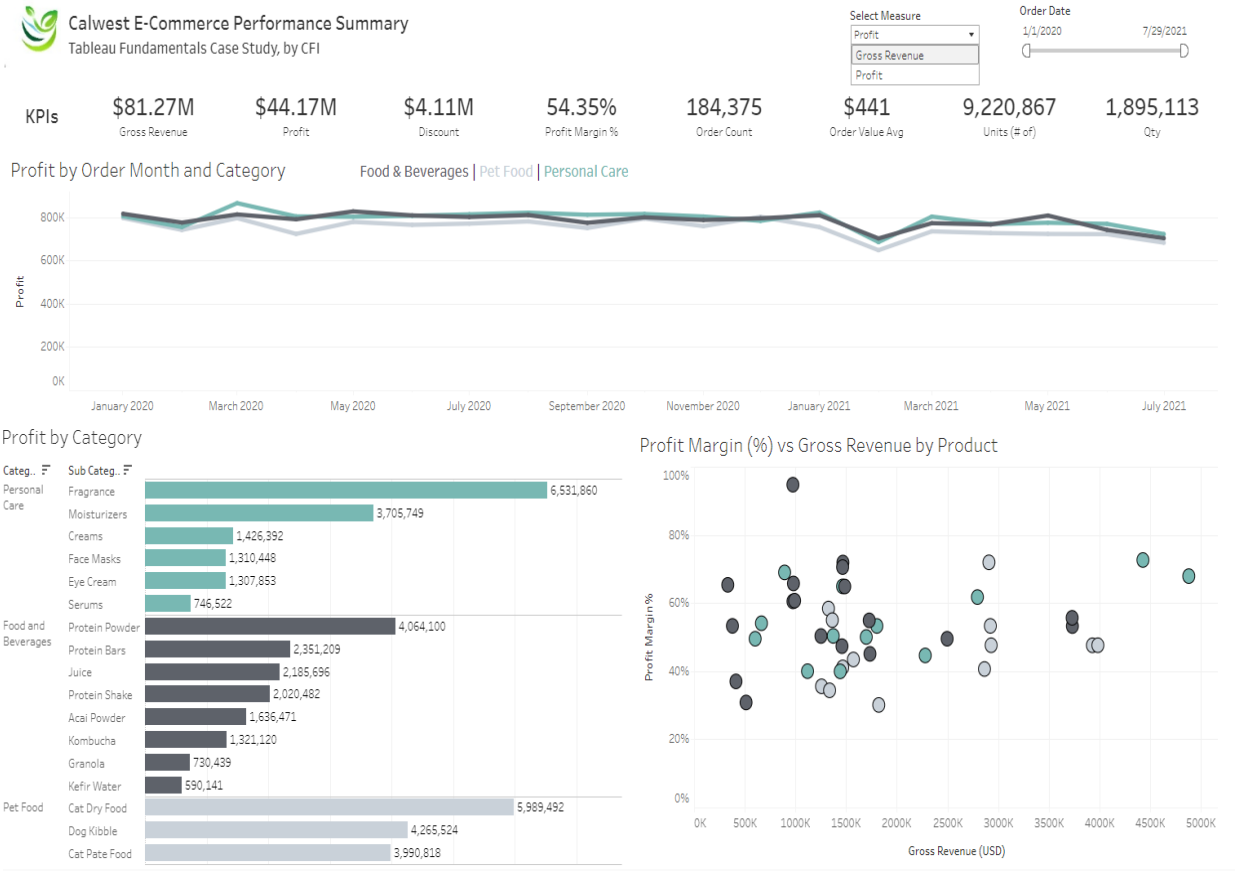
After grabbing the data from the Tableau Fundamentals Case Study file, I created the relationships between the dimension tables and the primary fact table.



I then created some formulas necessary for various graphs and charts that would be used in the final dashboards.

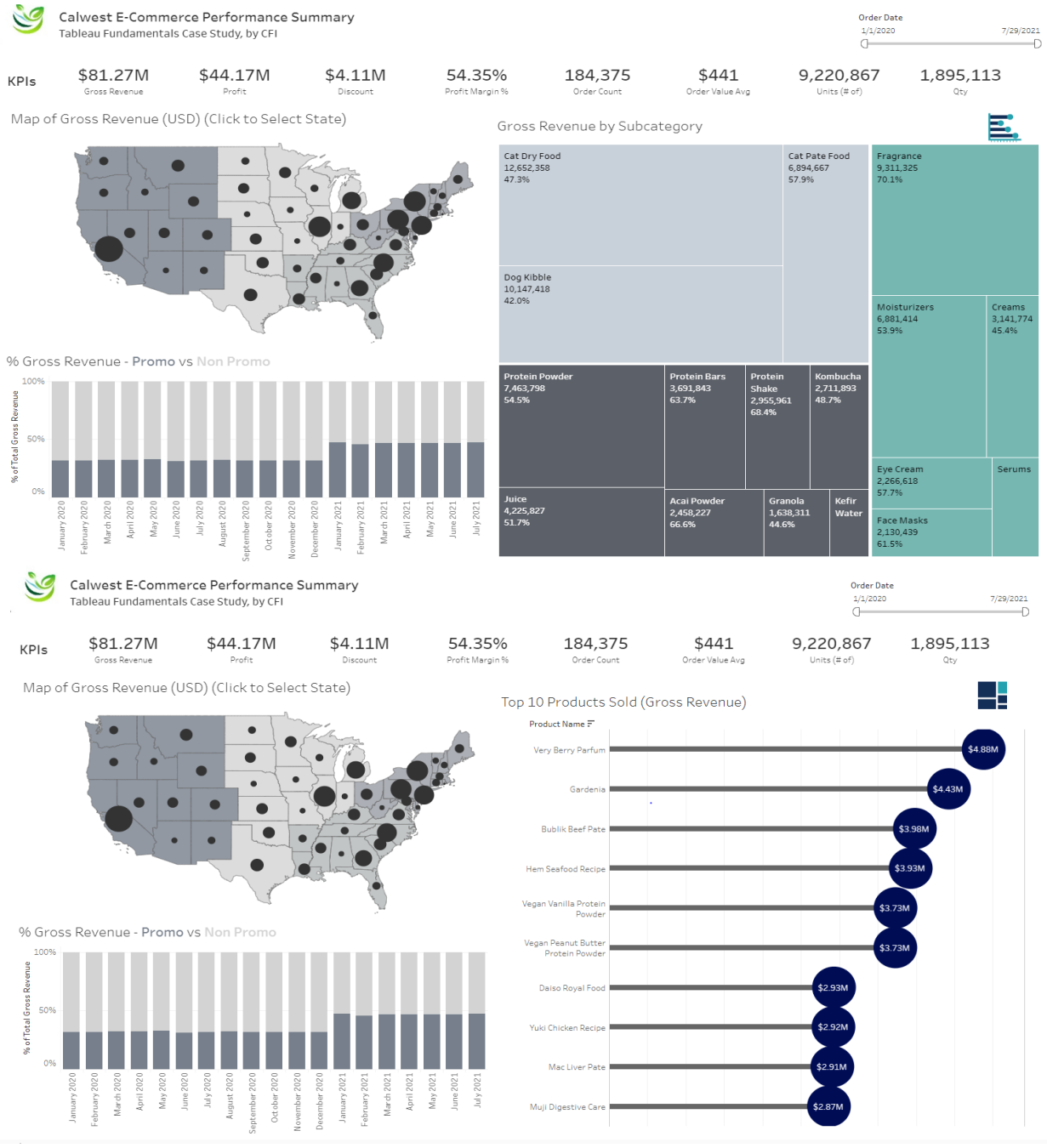
Profit	SUM([Revenue]) - SUM([Cost])
Gross Revenue	SUM([Revenue])
Profit Margin %	[Profit] / [Gross Revenue]
Profit Margin % (Row Level)	([Revenue] - [Cost]) / [Revenue]
Discount	SUM([Base Revenue]) - [Gross Revenue]
Qty	SUM([Quantity])
Units (# of)	SUM([Units])
Order Count	COUNTD([Order ID])
Customer Count	COUNT([CustomerId])
Order Value Avg	[Gross Revenue] / [Order Count]

The first dashboard contains visuals highlighting the high level company data. The first visual contains KPIs highlighting that important high level data at a quick view. There is a line chart that shows performance by the product categories over time. This visual can be changed to show either profit or gross revenue product performance over time. The bar chart drills the product categories further down into their sub-categories to get deeper data on the high performing sub-categories. This visualization also can be modified to show profit or gross revenue of the sub-categories. The final visualization is a scatterplot of profit margin percentage versus gross revenue, again by product to determine the efficiency of the gross revenue earned from these products.



All these visualizations combined onto this dashboard help show the company which products are performing the best and which ones are lagging. This allows the company to focus on increasing marketing and quantity of those lagging products that don't provide as much gross revenue, but generate significant profit based off their profit margin percentages.

The second dashboard contains visuals detailing regional performance. The map visual can be interacted with to find more detailed revenue and product information for that given state and there are circles in each state. The bigger the circle, indicates a higher percentage of gross revenue comes from that state. The stacked bar chart shows percentage of made from promo/discounted sales vs. non promo sales on a per month basis. The tree map breaks down the gross revenue in various subcategories and can vary based on the state chosen. There is also a lollipop graph button icon, above the tree map can toggle between the tree map and a lollipop chart. The lollipop chart shows the top 10 products sold by revenue and will also interact with different states being selected from the map.



All these visuals also interact with the date slider to give a wider or more detailed snapshot of regional performance during the chosen time. Company-wide action plans implemented uniformly across all states may not provide the growth in revenue expected out of some states and may hinder the growth of that states' gross revenue. The visuals combined onto the regional performance provide the company the necessary information needed to look not only company wide, but also drill down to state level details so that action plans can be made for specific states to either sustain or improve gross revenue.

*This project can be accessed and interacted with by clicking on the link here to my Tableau public profile:

https://public.tableau.com/app/profile/samuel.davison/viz/TableauCaseStudy-CFI/Dashboard1/

*There is also a link at the bottom of my github portfolio page:

https://davison83.github.io/