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Subject: Final Project

## Introduction

What you will find in the following memo is an arrangement of different data sets analyzed using two different systems. First, we used SAP Lumira followed by SAP Predictive Analytics. With each set of data you will find a description detailing the results along with the corresponding graph or chart. Our first set of data is going to be analyzed through SAP Lumira program using a column graph with two X -axis. Using the same set of data from the previous graph, we made another graph and this time we used two line graphs to analyze and describe the data. For our third chart, we continued to utilize the same set of merged data, but we changed the variables being compared. The third image is a chart that depicts correlation between the number of issues reported and the quantity of goods sold. Our next two graphs are a circle graph and then a dot plot. These two graphs continue to use the same set of data, but compare variables that have not been used yet. The same can be said about our final two graphs, another circle graph and a bar graph. They compare variables that have not been compared yet but that are important to marketers.

## SAP Lumira: Quantity and Quantity Sold by Country

This graph shows us the amount of product each country has and the amount of that product that the country sells. Most of the countries have a higher quantity than a quantity sold. This makes the most sense because if they sell more than the amount they have on hand then they will have to import more of the product to meet the demand needs. This is important because knowing how much a country has on hand versus how much they are selling can help you decide from which country you would me more likely to import goods. If a country has a very high quantity but not a very high quantity sold then they will be more likely to sell what goods that they have leftover.


Country

This graph depicts the quantity of product that each companies has. The USA has the highest quantity with 251,190 and Portugal has the least amount with 3,875 . This graph also shows the running average among the whole group of data. The running average is depicted in the blue line and runs along the middle of the data. By looking at this graph we can see which countries are more successful than others. We can also see the running average which helps us analyze the countries by comparing them to one another through the average. The running average does not change too much. This makes it easier to tell which countries have a very high quantity versus those that do not.


This chart represents the correlation between the number of issues reported and the quantity sold. The data shows that areas with fewer number of issues had a higher quantity sold. This makes sense that fewer issues would result in more quanties sold on average. There are some occasional outliers but on average, the data shows that fewer issues equals higher quantity sold, and vice versa. This chart is relevant because if more issues are reported than people are going to be less likely to continue purchasing products, therefore in the areas where there are a high number of issues reported, there tends to be lower number of quantity sold.

[^0]Quantity sold

## SAP Lumira: Customer Number by Deal Status

This circle chart shows us the status of their deal based upon their customer number. That means that we can tell that customer number \#947,763 won their deal, \#1,758,325 lost their deal, and \#2,318,199 has not won or lost their deals yet but still has deal opportunities available. It is important to know how many deals have been won or lost when you are trying to close a deal yourself. If you are able to see that a lot of deals have been sold with particular customers than you know that your chances of closing a deal with that same customer are high. On the flip side, if you recognize that a particular customer number loses a lot of deals than your chances of closing a deal with them is very low.


## SAP Lumira: Sales Revenue and Cost of Goods Sold by City

This dot plot shows us what the revenue and COGS for different cities is. These two variables go together because the higher your COGS is then the lower your sales revenue is going to be. They also go hand in hand because the costs of goods sold is the direct costs attributable to the production of the goods that are sold by a company. So if you sell more goods, increasing your sales revenue, then you will also have to produce more goods, then increasing your cost of goods sold. Cities like Casablanca, Madrid, and New York are outliers to this idea. Casablanca has a very high cost of goods sold but a low sales revenue, which would mean that it either costs a lot to produce their products or they just didn't sell a lot of goods. Madrid and New York both have very low COGS and high sales revenue. This means that they either sell a lot of products or their goods do not cost a lot to produce.


## SAP Lumira: Customer Satisfaction by City

This line graph just shows the customer satisfaction on a scale of $0-350$, with 0 being the most unsatisfied and 350 being the most satisfied. The customer satisfaction is based off of the city in which the consumers are in. The majority of the cities maintain a high level of customer satisfaction, but there are a few cities that have a drastic drop from the majority. Shanghai, Nairobi, Lyon, Caracas, and Frankfurt all drop below the satisfied majority. These cities have a customer satisfaction around 150-200 instead of 300-350 like the other cities. If you are able to see the customer satisfaction from different places around the world, then you are able to decide where you should purchase from. If you see that a city has a very poor customer satisfaction then you know not to purchase from them because you will likely not be happy with the purchase.

## Customer Satisfaction by City



City

## SAP Lumira: Sales by Numbers

The graph below represents the difference in sales between the years 2012, 2013, and 2014, as you can see the company produced much higher sales amounts in the year 2013 than 2012 or 2014. The number of sales in 2013 are more than 2.5 times the amount in 2014. If you are able to see the difference in sales across a couple year period, then you can go back and look at your marketing strategies from each year and you can see what was more successful and what did not work for your company. You can use this graph to compare numbers, strategies, and successes.


## SAP Lumira: Cost of Goods Sold by Product

This graph shows how much money it takes to produce each different product. If the company knows the amount it takes to produce each product, it can help them with their pricing and the comparative pricing between companies in order for them to have the best deal on a particular item. Also, if the company notices that cross fit gloves are a low cost item, then they can try to make more revenue by selling an item that doesn't cost much to produce. Having this insight can help a company decide what they want to produce and how much profit they will earn when producing and selling different items.


## Conclusion

During this memo we have learned that based upon different marketing analytics and data sets, a company can use these data sets to better market a product to a consumer. When looking at the data through the SAP Lumira program, we are given multiple sets of data to insert into the program in order to better understand what is being shown and told to us. By creating these different graphs and charts, we are able to understand consumer behavior and plan out marketing strategies accordingly. Programs such as SAP Lumira are a powerful tool for an organization to use and explore in order to better their marketing plans, increase their profits and revenue and increase their capital.


[^0]:    Number of Issues reported by Quantity sold
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     $32 \ldots 32 \ldots 33 \ldots 33 \ldots 34 \ldots 34 \ldots 34 \ldots 35 \ldots 35 \ldots 36 \ldots 36 \ldots 36 \ldots 37 \ldots 37 \ldots 37 \ldots 37 \ldots 38 \ldots 38 \ldots 39 \ldots 39 \ldots 39 \ldots 40 \ldots 40 \ldots 40 \ldots 41 . . .41 . . .41 . . . \mid$
    
    
     $10 \ldots 10 \ldots 10 \ldots 10 \ldots 10 \ldots 10 \ldots 10 \ldots 10 \ldots 10 \ldots 10 \ldots 11 \ldots 11 \ldots 11 . .11 \ldots 11 \ldots 11 \ldots 11 . . .11 \ldots 11 . .11 \ldots 11 \ldots 11 \ldots 11 \ldots 11 \ldots 11 \ldots 11 . .11 \ldots 11 \ldots 11 \ldots 11 . . .11 \ldots 12 \ldots 12 . . .12 \ldots 12 \ldots 12 . .$. 12... 12... 12... $12 \ldots 12 \ldots 12 \ldots 12 \ldots 12 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 13 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots 14 \ldots$ 14... $14 \ldots 14 \ldots 14 \ldots 14 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 15 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots 16 \ldots$
    
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