

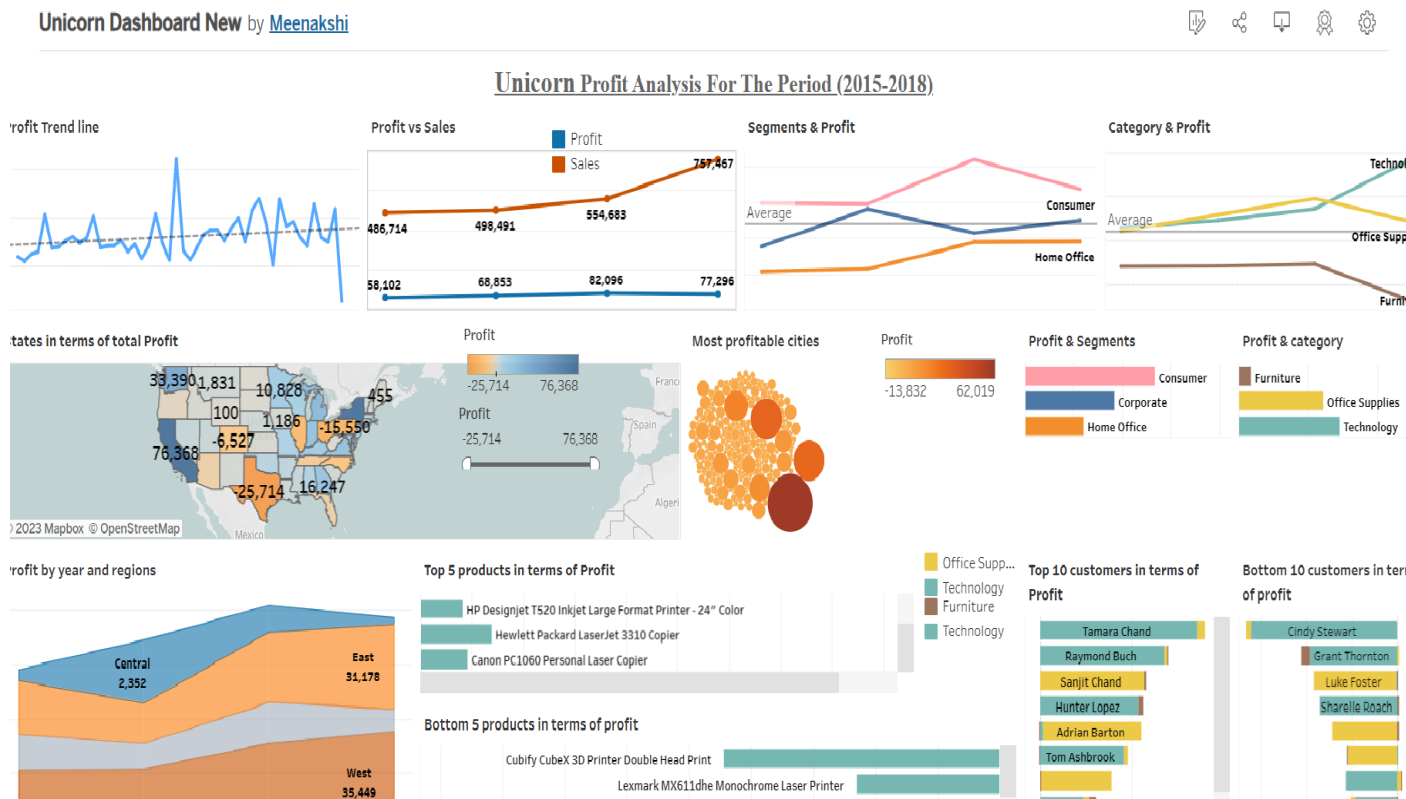
Unicorn Data Profit Analysis for The Period Of 2015-2018

Introduction: This report is presenting Profit Analysis for the E-Commerce website Unicorn which is an online platform to buy different products online. This report contains a brief description of different visualizations which are insights of data, profit measure and its exploratory analysis and future recommendations for growth in profit. All the insights created on tableau based on sales data collected by Unicorn for the period 2015-2018. The objective of this report is to help Unicorn to grow their business and transform their sales data into unique insights to make the right decisions for future growth in profit and its business.

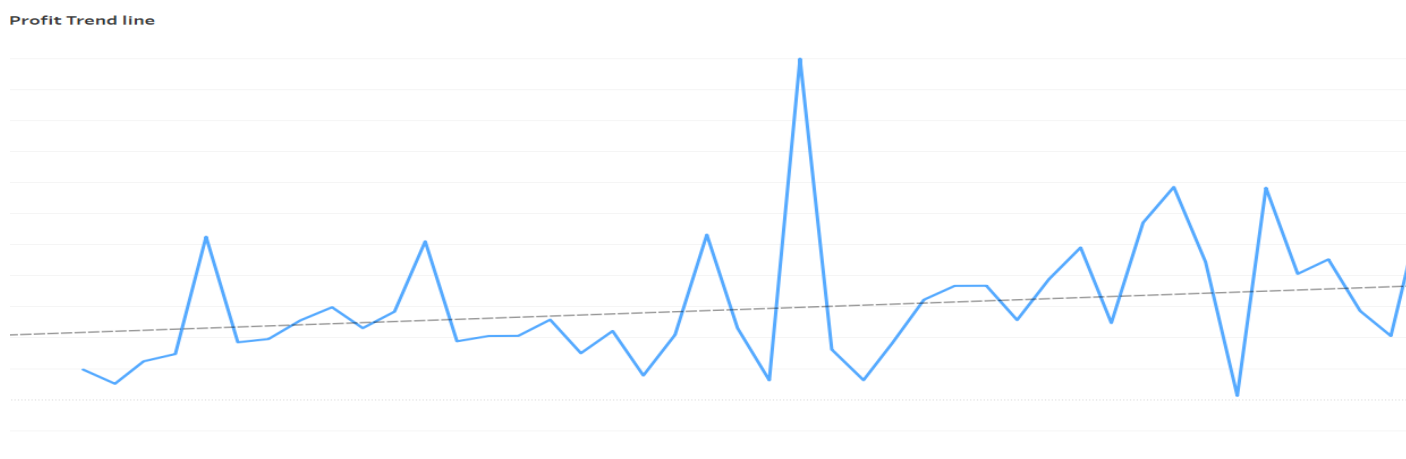
For the Analysis of profit for the Unicorn data , I tried to consider Following Questions which can help us explore data specific to profit-related measures.

- Question 1 : How profit is doing for the given period and how it is trending during this period ?
- Question 2 : If we compare Profit vs sales data then what was the percentage of profit of total sale?
- Question 3 : How different segments of customers are doing in terms of profit in this period?
- Question 4 : What is the profit generated by different categories of products and which category is contributing the most?
- Question 5 : Which states are doing better in generating profit and which are not?
- Question6 : Which cities are doing good in terms of profit?
- Question7 : How different regions are contributing to profit?
- Question8 : Top products and their categories which are generating more profits.
- Question 9 : Which products are not doing good in terms of profits?
- Question10 : Which customers are profitable and which customers are not doing good in profits for the Unicorn.

Some important insights which are reflecting answers to the above questions can be described with the help of below dashboard:



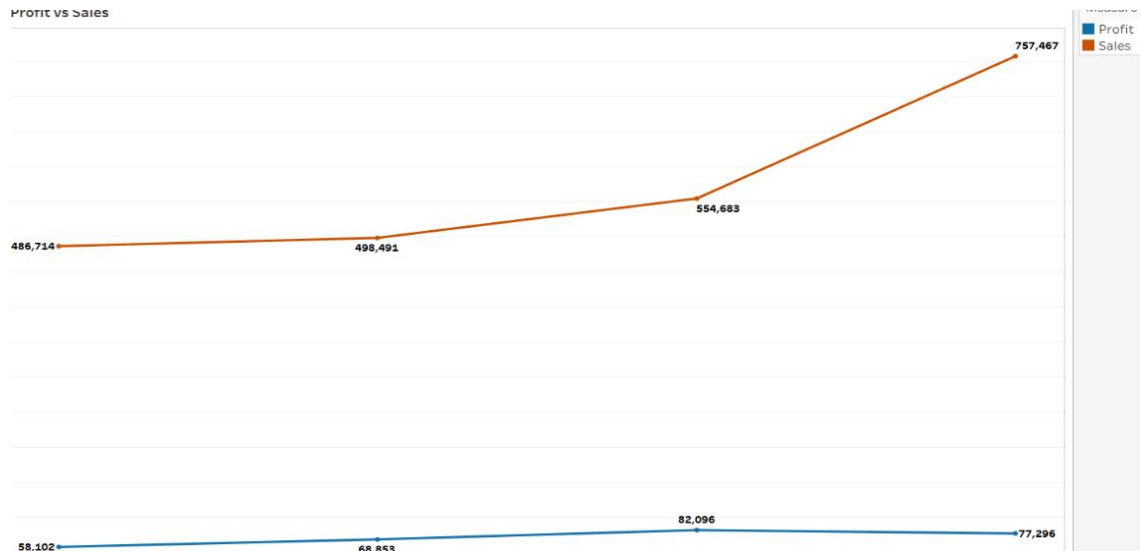
Profit Trend Line:



This insight, which is a line chart, shows monthly profit for the year 2015-2018. This insight reflects up and down in profit during this period. This chart also contains a profit trend line which is very important to show in what direction profit is going on for the given data. The chart shows that in December-2018 profit dropped on a large scale. But the profit trend line

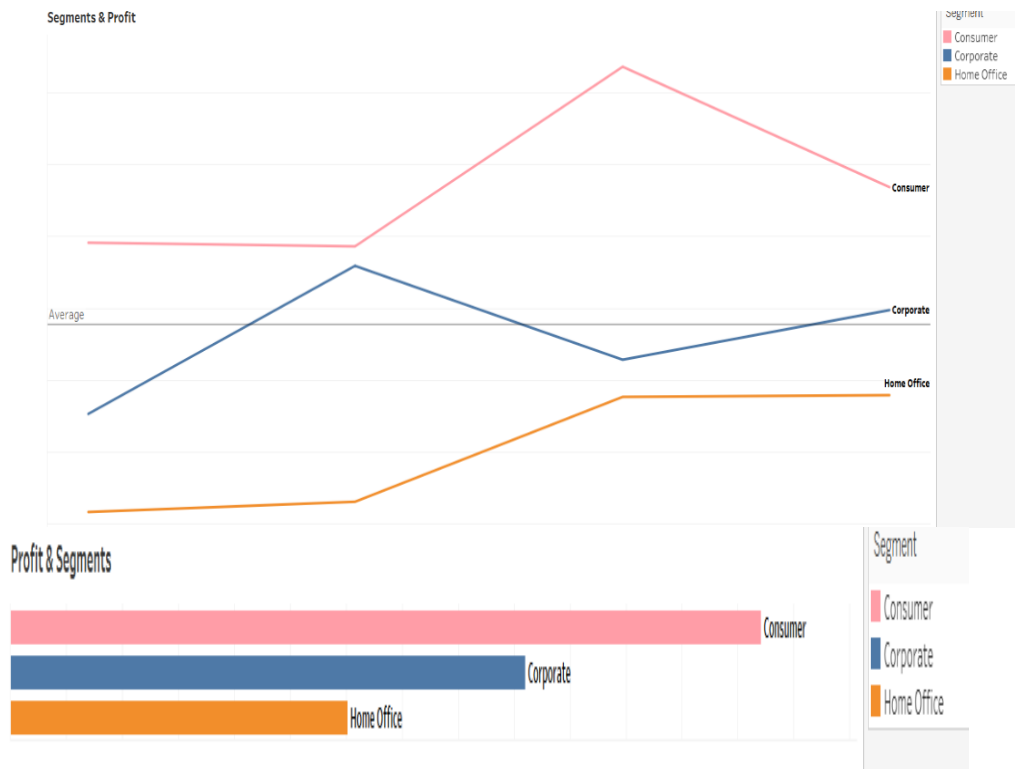
shows that the profit for the next financial year would be above 11000 dollars.

Profit vs Sales



This chart shows comparison of sales and profit gain through those sales during the given period. This insight also shows the percentage of profit of the sales done in that year.

Segment & Profits

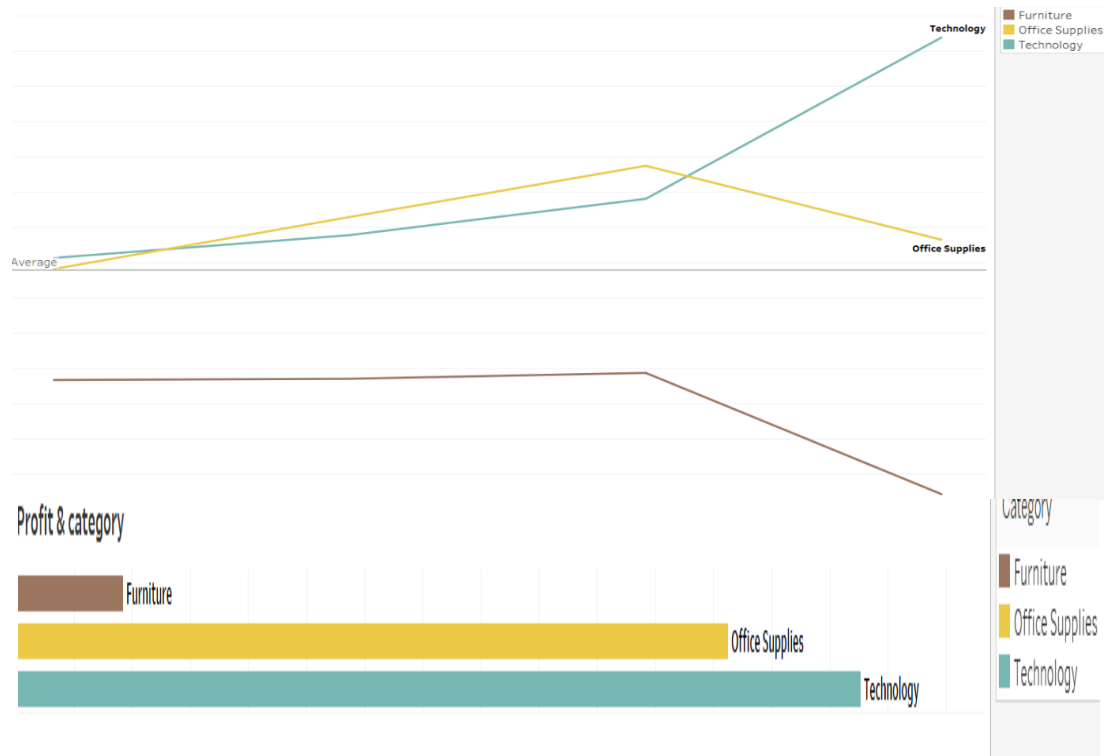


This insight visualizes different customer segments which are consumer, corporate and home-office and profit generated by each segment during the period.

From the segment and profits line graph we can see that consumers are doing better, and they are above the average profit line. Corporate are doing along the average profit line during the years. But the Home-Office generates profit below the average line, so we need to investigate the reason why is that?

The bar graph for segments also reflects that Consumers are generated most profit, Corporates are in middle, but Home-Office are least profit generating segments.

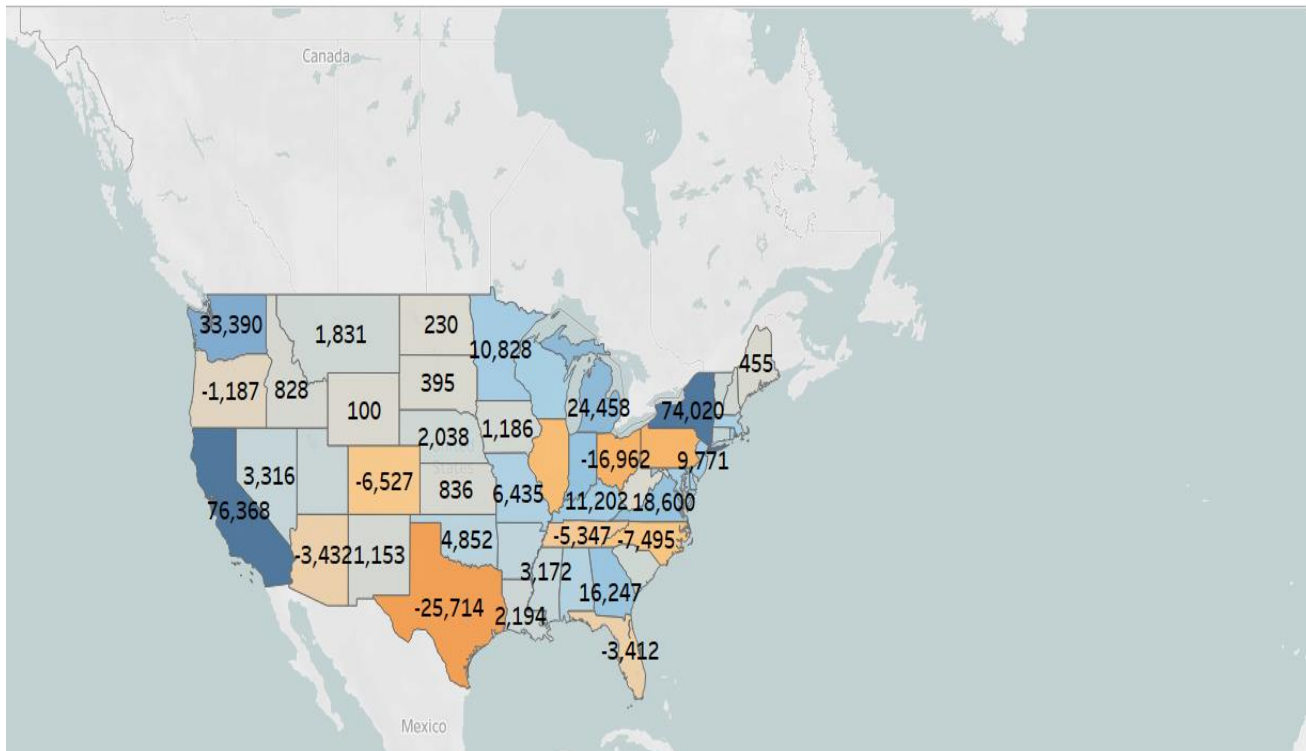
Category & Profits



This line chart shows how different categories of products created profit for the past four years(2015-2018). In this chart we can see that the categories which are generating profit above the average line are Technology and Office-Supplies whereas the category which is generating profit below the average line is Furniture. Also, from the bar chart we see that category Technology is producing more profit than other two categories. But the concern is why Furniture is not doing good and we must investigate in this direction.

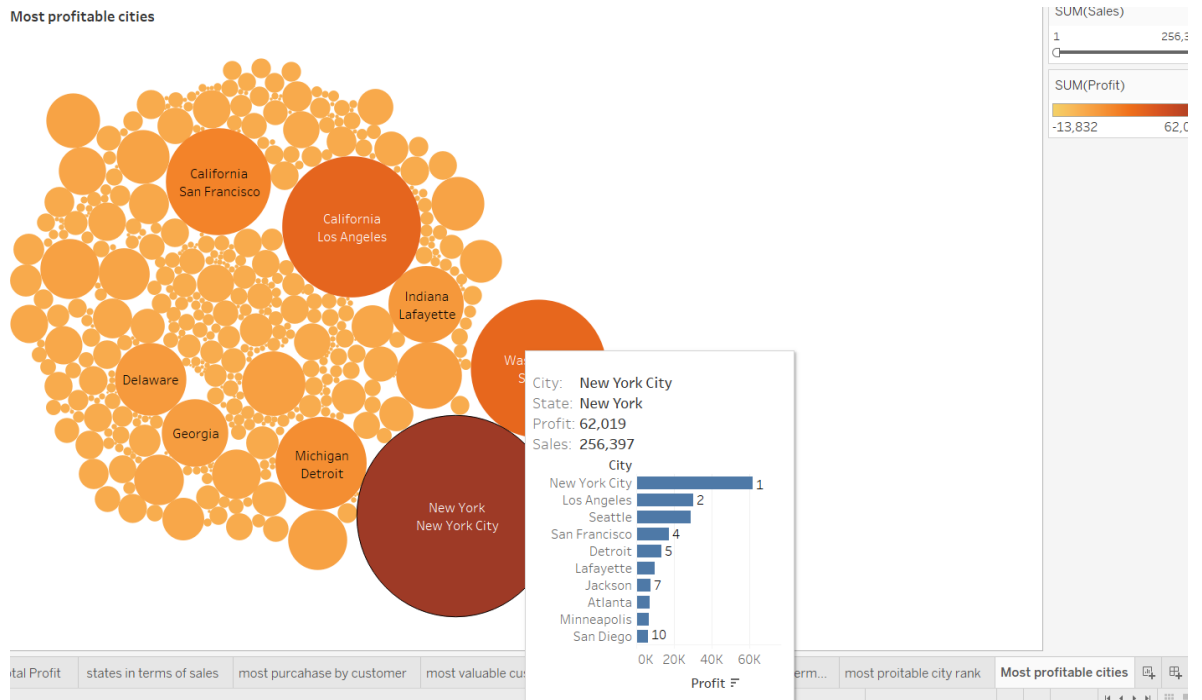
States in terms of total Profit

States in terms of total Profit



This map chart visualizes how different states are doing in terms of profit. And we can see that the states which are bluer in colour are doing good in profits and the states which are more orange in colour are not doing good in generating profit. The most profit generated by the state is California which is 76,368 dollars and the state which is generating least profit is Texas and this is a loss of -25,714 dollars. So, we need to identify why those states are not doing good or having loss in profits.

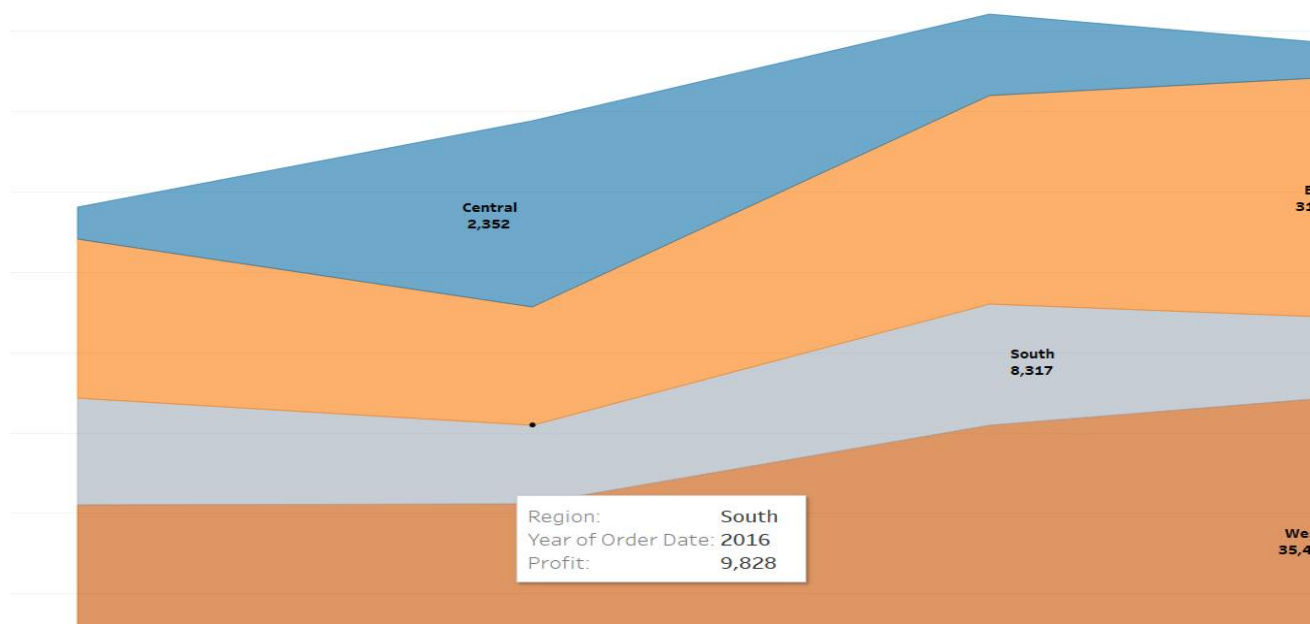
Most profitable Cities



If we investigate the bubble chart above, we see how different cities contribute to the total profit generated. This chart also shows ranking the cities in terms of total profit generated by those cities. The city which is creating more profit is New York and it is on rank 1. The no. 2 and 3 cities are Los Angeles and Seattle. The Cities which are darker in shade and bigger in size are in a good position in profits rank and cities which are lighter and smaller in size are lower in rank in terms of profit. So, we need to take appropriate measures to improve in this area for those cities.

Profit by year and regions

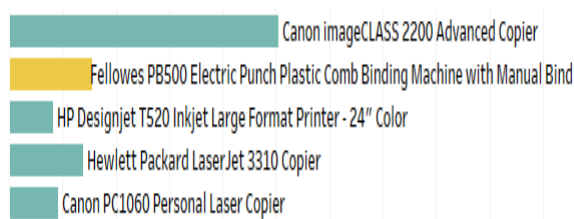
Profit by year and regions



If we see the profits region wise for the given period, we clearly visualize that the west region is doing very well, the most profitable region in profit and there has been increments in profit in the period from 2015 to 2018. The East region is also showing positive increment for this period. In the central region profit is decreasing in 2017-2018 and it is the least profitable region. The South region is the third largest profitable region after the east region. From this area chart we can see that the regions which are not as profitable as other regions are the south and central region, and we must look into it.

Top 5 products in terms of Profit

Top 5 products in terms of Profit

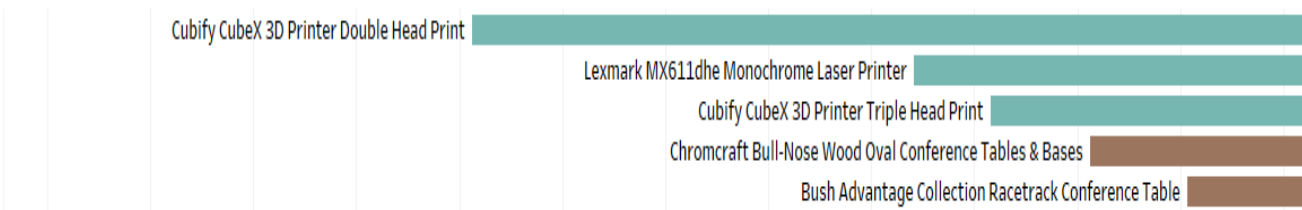


Furthermore, if we analyze profit product wise, which means which products are contributing more to the profit by the above bar graph then we can find the top 5 product lists which are generating more profit. And the top product

is Canon image Class 2200 Advanced copier. We also see that in the top 5 products 3 of them belong to the technology category and one is from corporate but not any product from furniture category. So, we need to think about why products from the furniture category are not doing much in profit and what is the cause behind that.

Bottom 5 products in terms of Profit

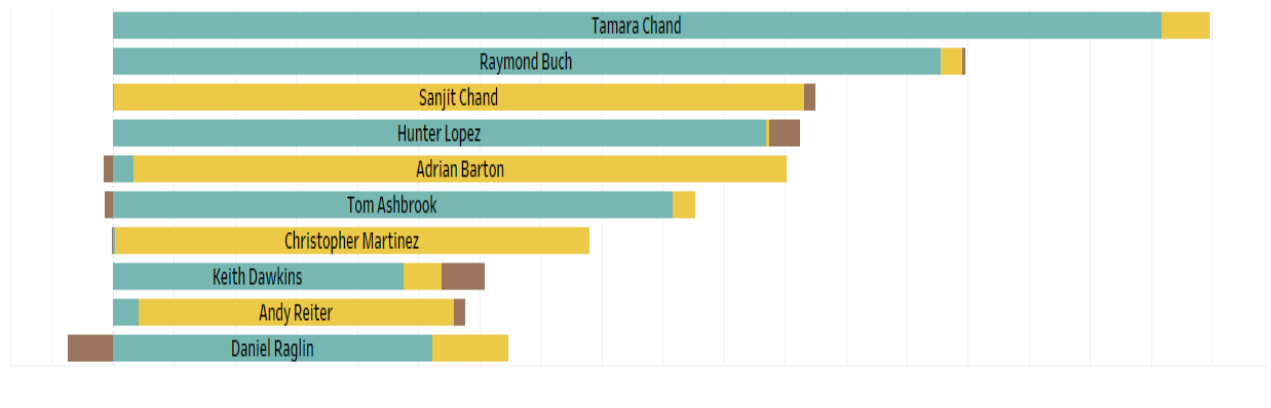
Bottom 5 products in terms of profit



Bottom 5 products in terms of negative profit which means they are in loss belong to the technology and furniture category. From the technology category three of them are printers. And we must investigate why printers are selling at a loss in this category. Two of the bottom 5 products belong to the Furniture category and we already have seen this category is not doing good and so many products in this are having loss in terms of sale.

Top 10 customers in terms of Profit

Top 10 customers in terms of Profit

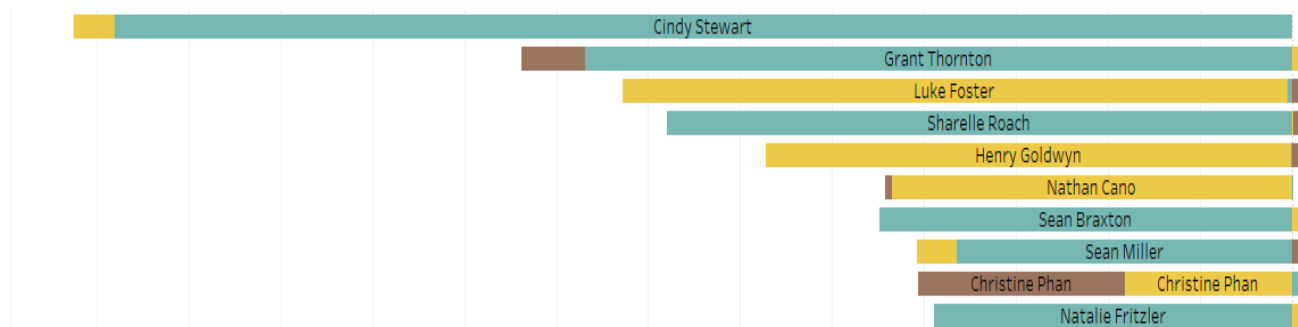


Finally, we investigate our customer data to investigate which are the most profitable customers, and business greatly benefited by them.

So, if we visualize the top 10 customers in terms of business in profits then our top customer is Tamara Chand who is buying products belonging to the technology and office supplies category. Above bar graph reflects that all the top 10 customers buying mostly products of technology and office Supplies and fewer products belong to the Furniture category.

Bottom 10 customers in terms of Profit

Bottom 10 customers in terms of profit



Bottom 10 customers list helps us to see which customers are giving loss to the business. And Cindy Stewart is the top in this list who is doing business with Unicorn mostly in Technology category. So, by this list we can identify which products are selling at a loss to those customers and why? and how can we turn those customers into profits?

Recommendations

- We need to investigate why profit had dropped in December-2018 while it was doing good in other years(2015-2017) for this month. Is there any drop in sales or profit margin, or we lost some customers during this period is the reason for that. How we can increase our sales and retain customers to overcome this situation.
- Apart from increasing sales from the 2017-2018 period our profit is dropping in this period. We need to investigate this, and low profit margin could be reason for that, so we must improve our profit margin by reducing operating cost or raising prices of some products which are giving us negative profit margin.
- The Home-Office segment is not doing well in profits, so we need to give more offers such as discounts or incentives to the customers belonging to this segment. Also, we need to

look at whether we are offering good quality products to these customers. We can offer them free shipping or maintenance support to attract these customers.

- In the Category section we already knew that Furniture is the weakest in terms of profit. So, we need to investigate product quality, update pricing, and improve marketing and distribution in this category. We can offer these products to the customers who are buying product belong to other category by giving discount on those products if they buy furniture along with them.
- When we analyze profit state wise then we need to look which states are in loss and which are in profit. What is the difference in strategy in those two sections of states? Can we follow the same measure in states which are in loss which we are already following in the states which are doing great in terms of profit? So, we need to investigate in this direction. We need to change our policies, marketing strategy and distribution in least profitable states. And the same thing we need to do for least profitable cities which are in loss. We need to investigate the infrastructure or policies of states towards online business, in which those cities are belong are responsible for loss in business and how we change our policies or strategy accordingly to turn this into profit for Unicorn's business.
- In regions we knew that the central and south regions are not doing as well as the west and east regions. So, we need to investigate Which states belong to these regions and how we can change our policies in these state for improving profit.
- In terms of Product, we need to identify which products are very profitable and try to offer those products to our valued customers and increase sales of those products. Also, we need to investigate which products are not doing good and we can ask reviews from customers on those products so we can identify product quality, return policy and maintenance related problems related to those products. Also, we need to offer discounts or free shipping offer in those products to increase their sale.
- Customers are key in the growth of any business. So, we need to identify value customers for Unicorn's business. Which are the most profitable customers and how we can

retain them by offering them good plans on products, offering them more discounts and pricing and making sure they are happy with doing business with us. Also, customers which are not profitable for Unicorn are challenges and making those challenges into opportunities should be the aim of a growing business. So, we should come up with a strategy to deal with those customers by offering them good business plans and turning them into our valuable customers. Providing excellent customer support is vital job for any business.

- Finally, Unicorn is an E-Commerce website and updating websites with new technology and design will attract new customers and this will help in business growth. Making Unicorn websites more user friendly and functional is very important to stay in the competition and business growth.

Tableau Link for Dashboard: [Unicorn_Project_Dashboard_Final | Tableau Public](#)