Sales Report Analysis

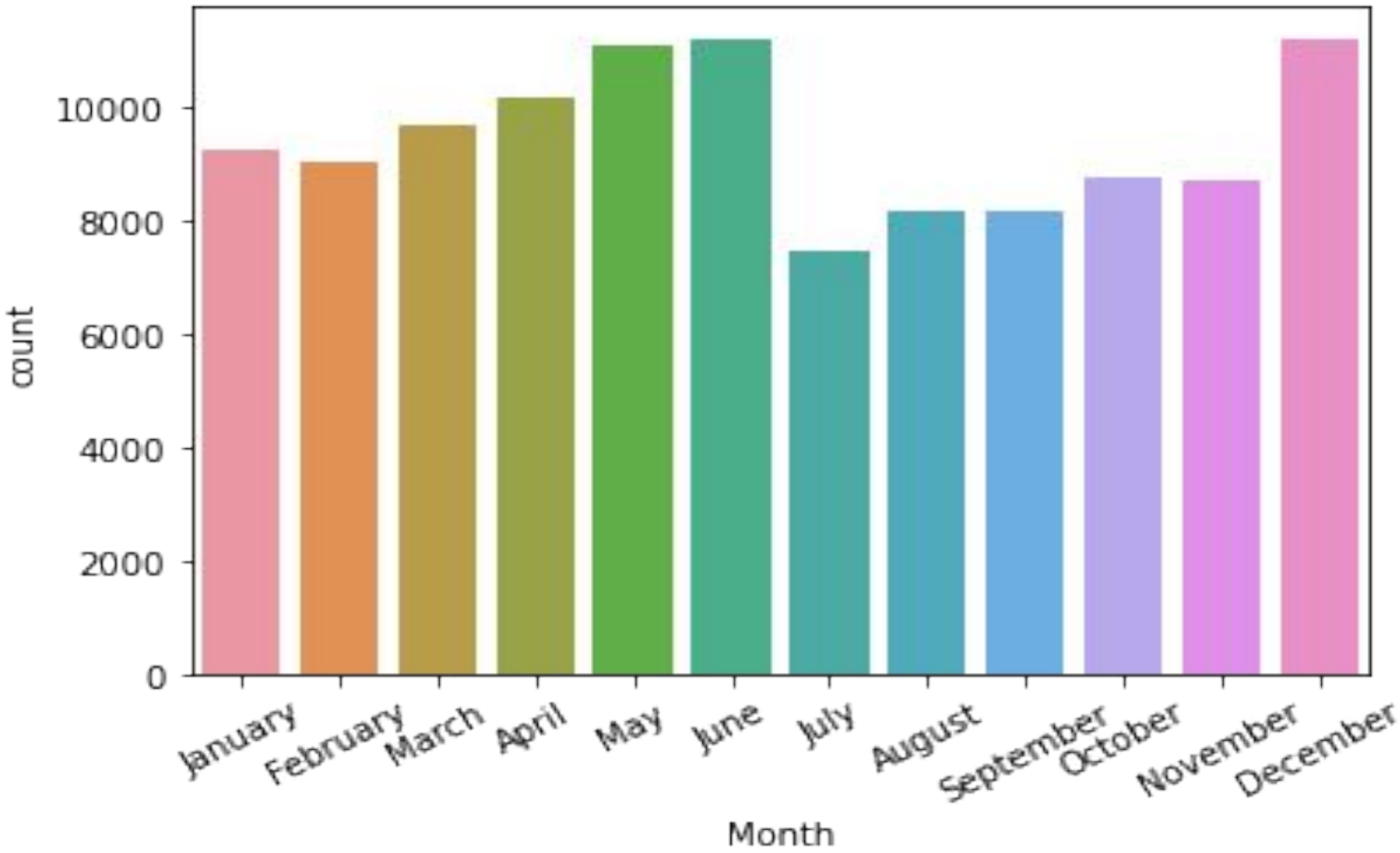
BK E_Commerce

Performance Analysis

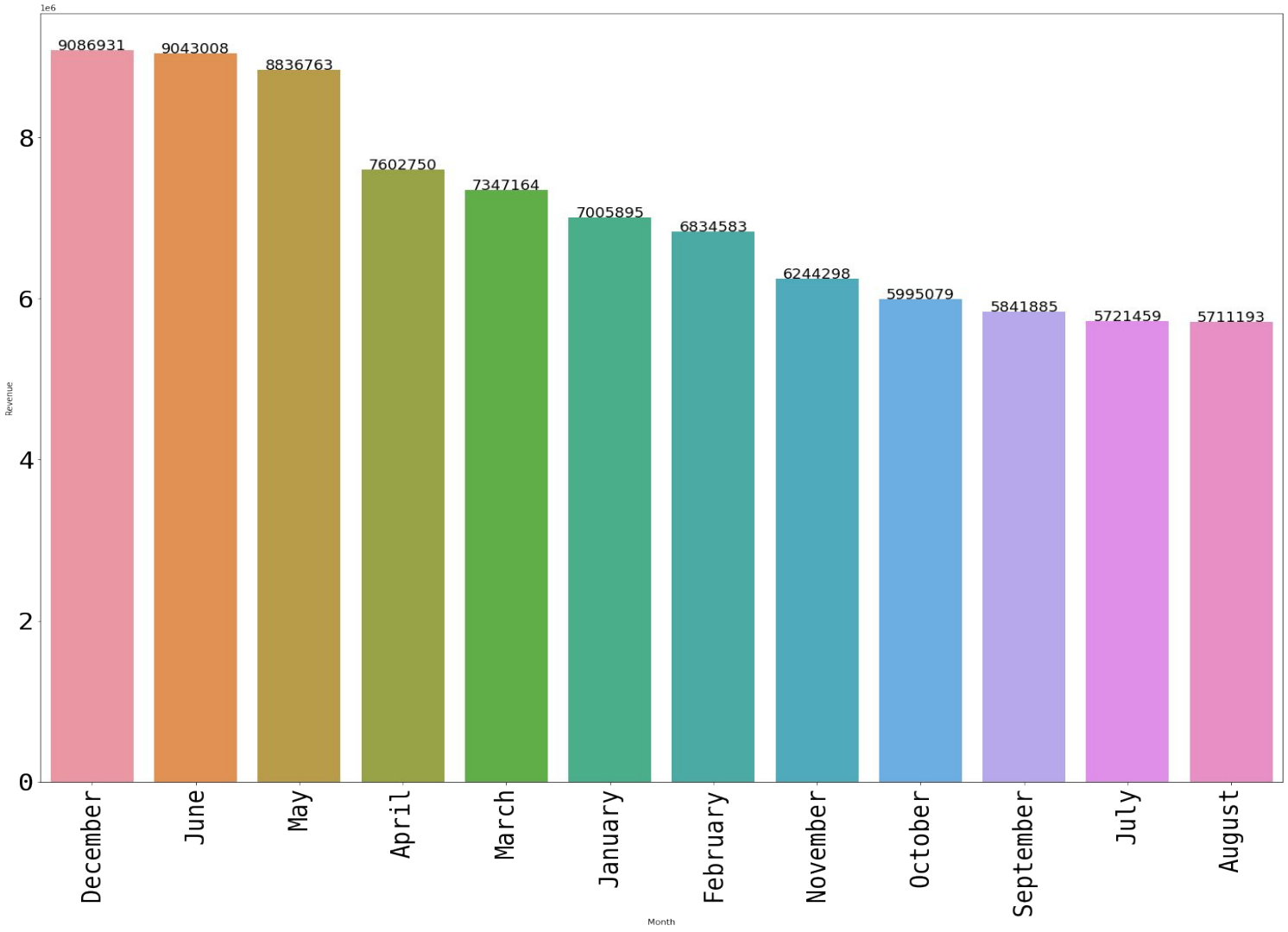
BK E_Commerce store sells Bicycles and Accessories globally and had solid profit for the past five years. They seek recommendation on:

1. Overall overview of sales trend over the past five years?
2. Which areas require improvement? And what areas have potential for revenue growth?
3. What product to add and/or remove?

Number of Transaction per month

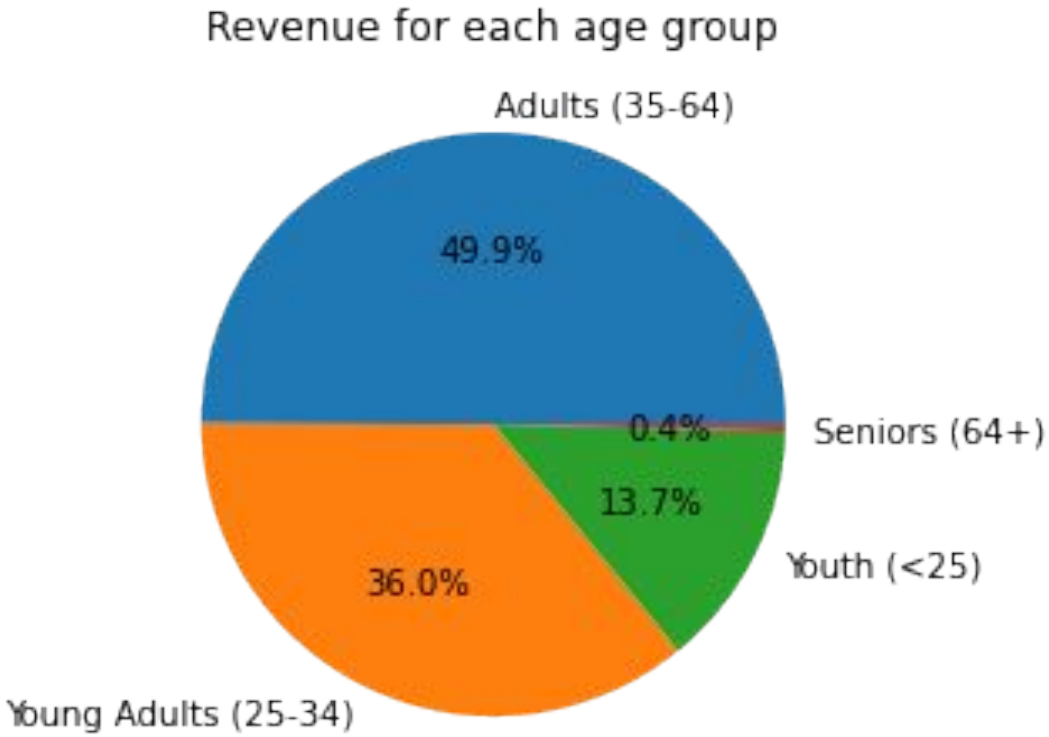


December and June are the highest revenue months, August and July are the lowest

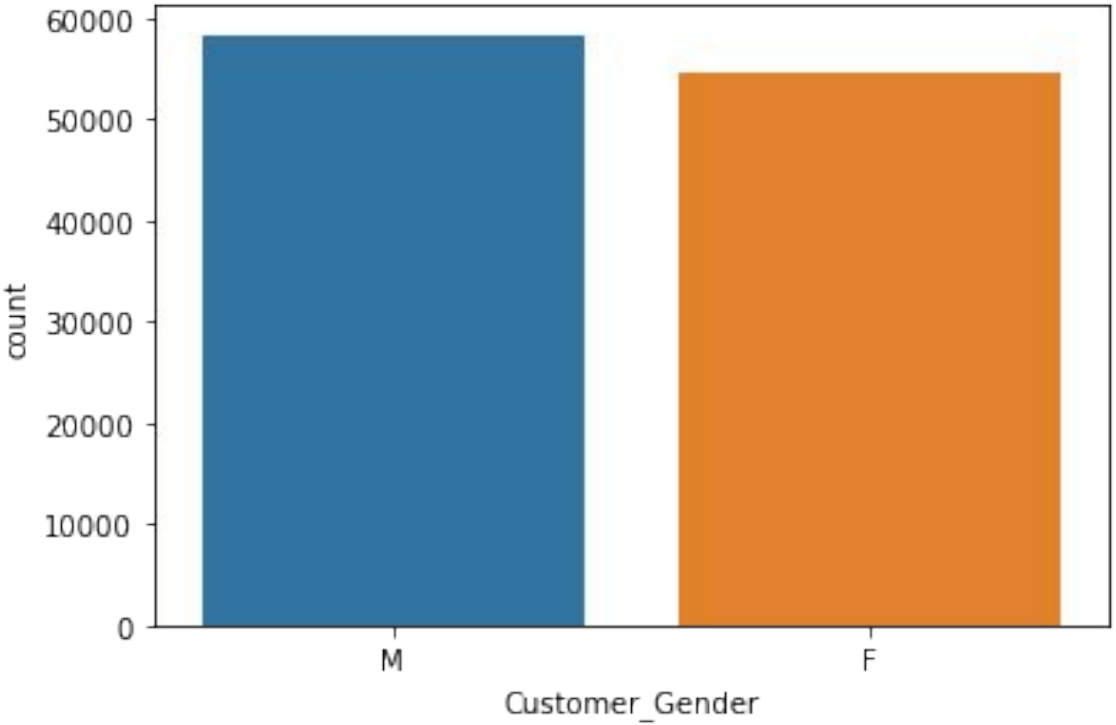


Revenue Per Age Group

About 50% of our clients are between the age of 35-64 and 36% are between the age of 25-34, which makes about 86% of our customers. it is recommended to invest more in marketing toward these two groups more than others.



Customer’s Gender Distribution



The Gender Distribution for our sales is about equal among male and female with male being slightly higher

Number of Items Sold

Top 10 categories (highest sold quantity per product):

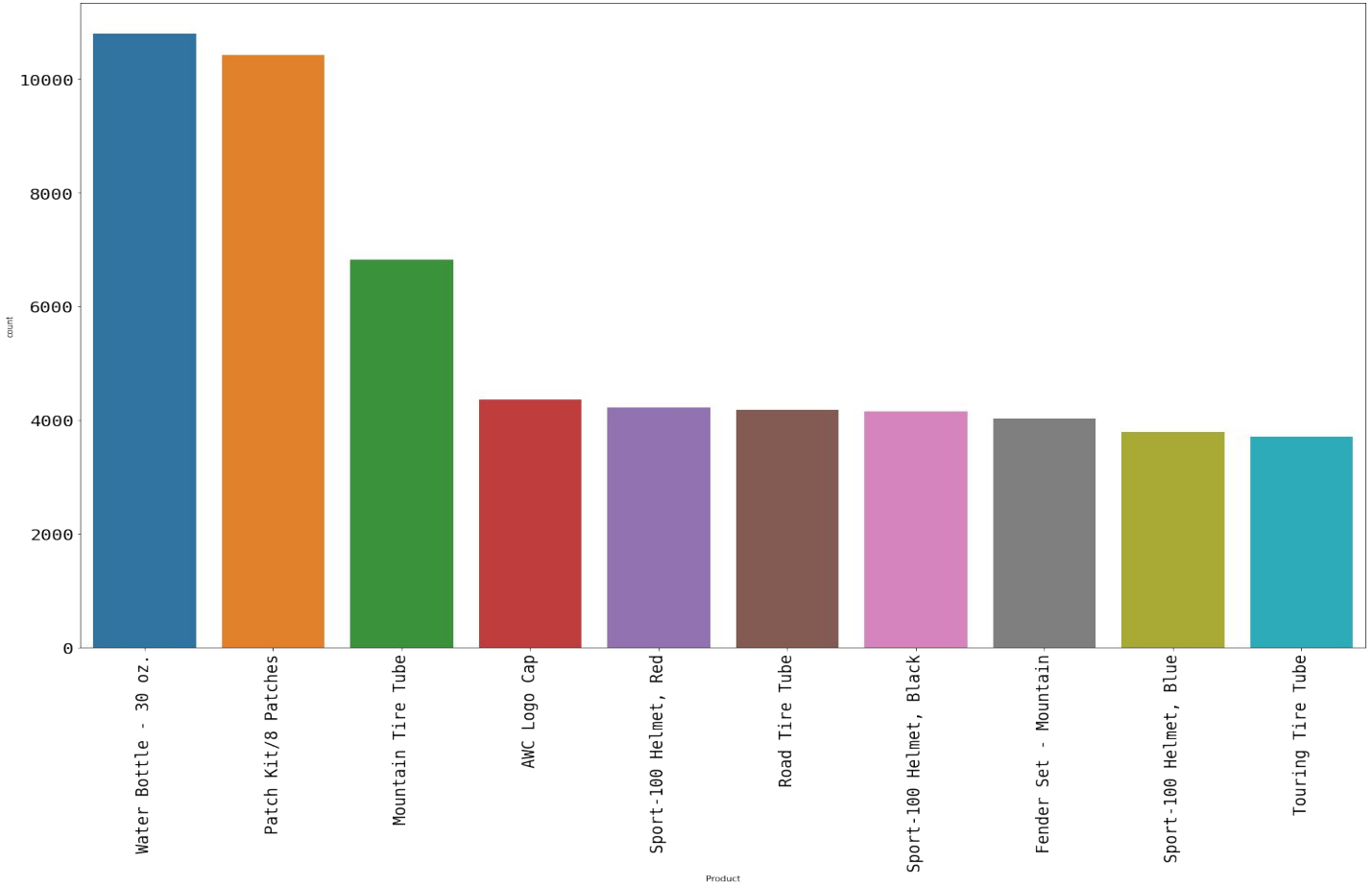
1.Water Bottle

2.Patch kit

3. Mountain tire tube

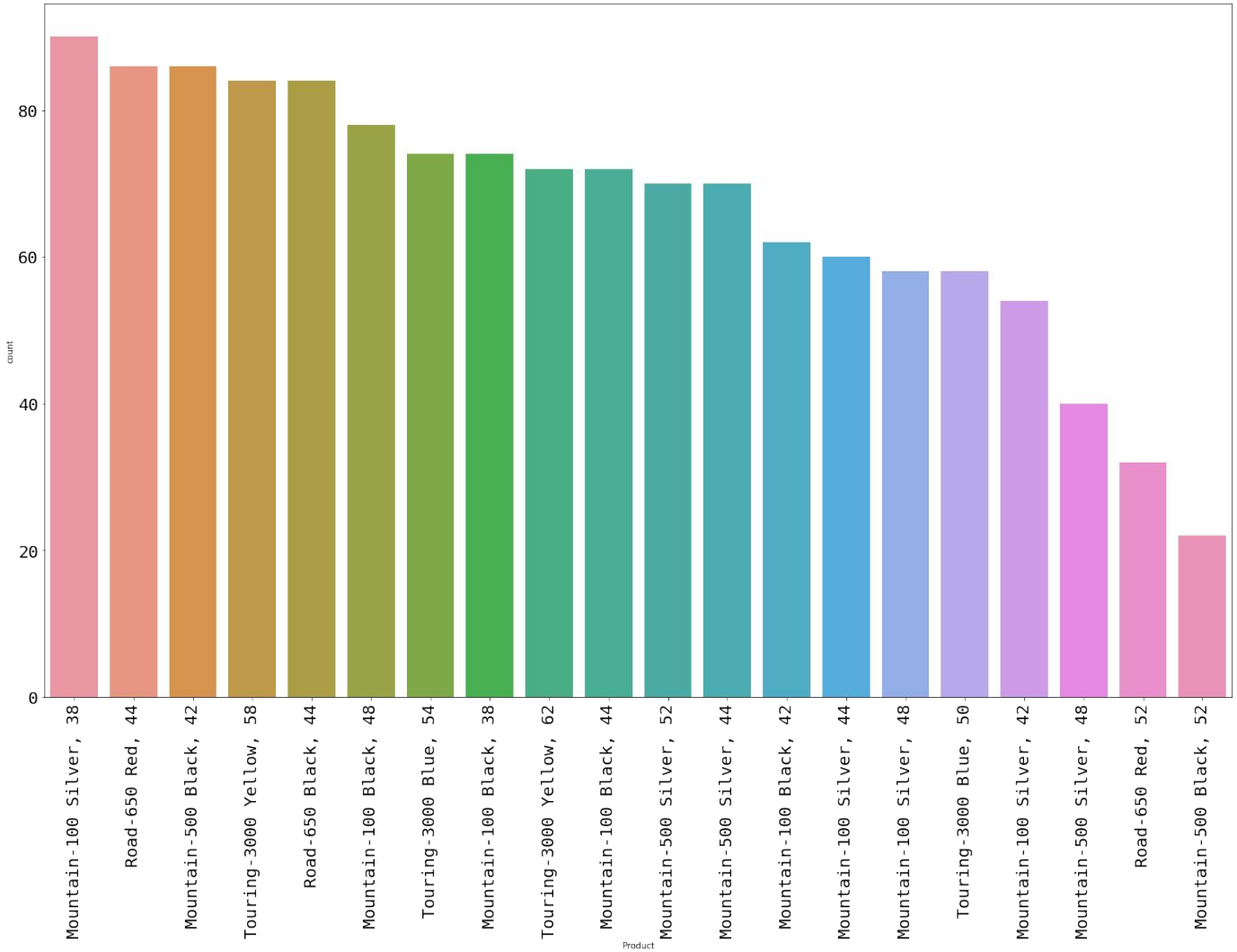
4. AWC logo cap

5. Sports Helmet



Slowest Selling Product

We should consider discontinuing the product that we do not sell more than 40 of them in a year



Profit Margin

Profit margin was not included in the data set provided, so I calculated the amount for each product. Top 5 products with highest profit margin are:

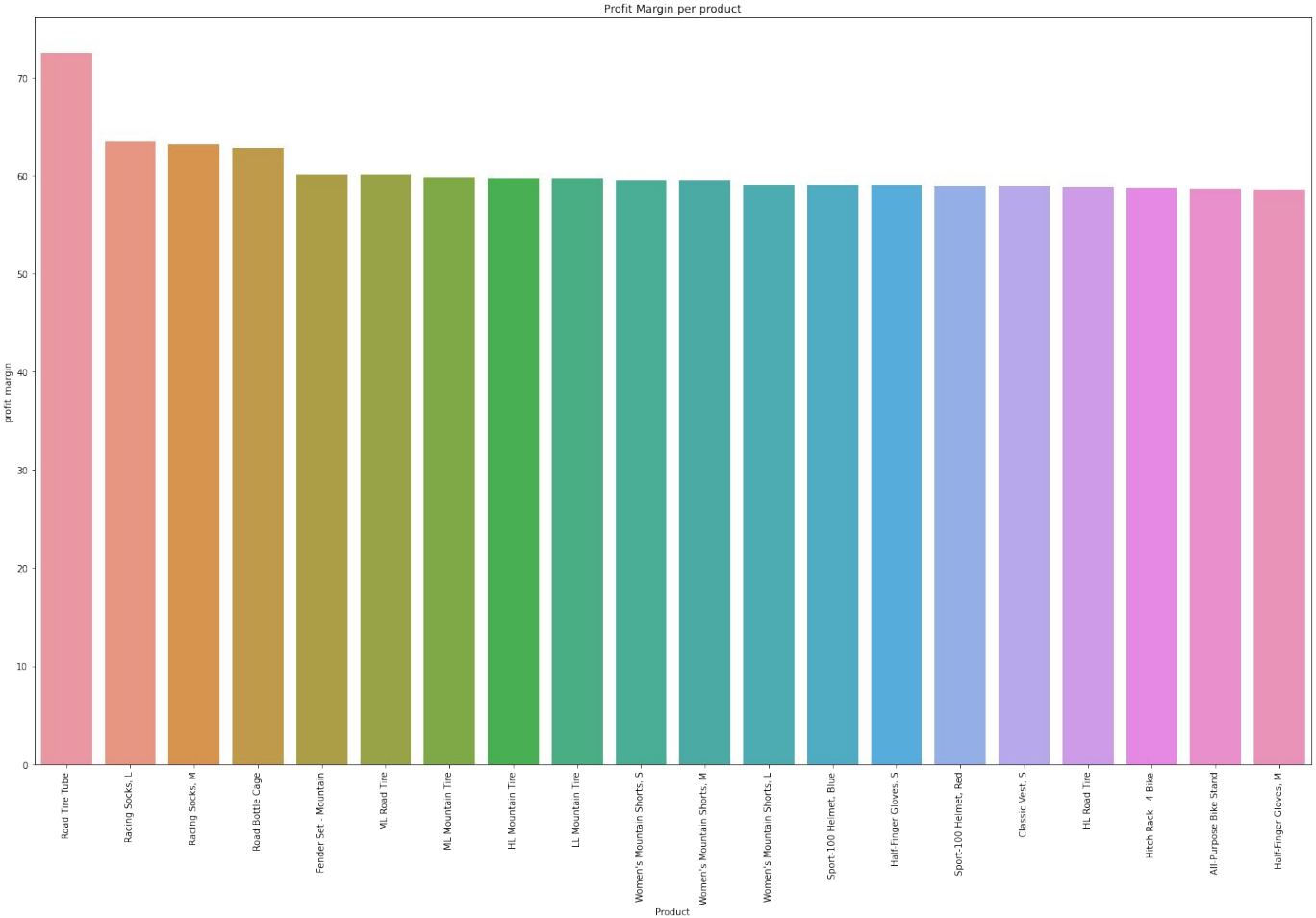
1.Road Tire tube

2. Racing socks

3. Road bottle cage

4. Fender set

5. ML road tire



Revenue Per Product Category
Profit Per Category
Profit Margin

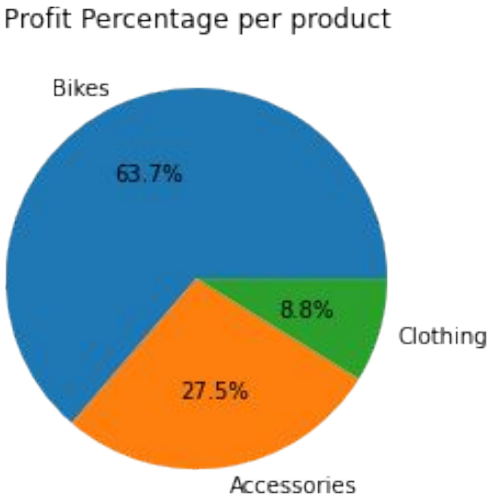
Product_Category	Profit	Cost	Revenue	profit_per_category	revenue_per_category	profit_margin
Bikes	20519276	41262858	61782134	63.682730	72.453857	33.212313
Accessories	8862377	6255615	15117992	27.504887	17.729346	58.621390
Clothing	2839447	5531435	8370882	8.812384	9.816797	33.920524

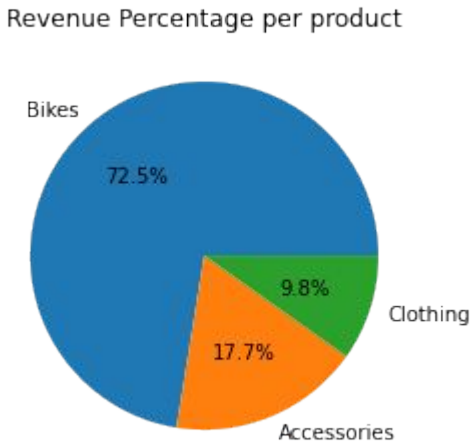
For better understanding of profit margin within each category and also as a whole, I did some calculation and added these column for each of the three product categories to our dataset; ‘Revenue Per Category’, ‘Profit Per Category’, ‘Profit Margin’.

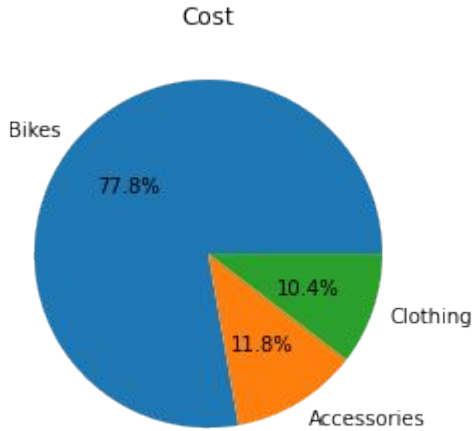
From my new added columns we can see that:

- Bikes category make up for 63% of company’s total profit, although profit margin for this category is 33%
- Bikes Revenue makes up for 72% of our total revenue
- Accessories has the highest profit margin amongst all of the categories
- Clothing line has almost the same profit margin as the Bikes, which make up about 10% of our revenue and 8% of our total profit

Revenue, Cost, Profit Distribution within each Category

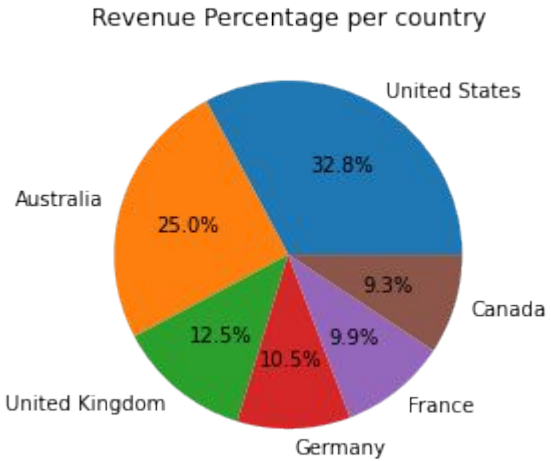


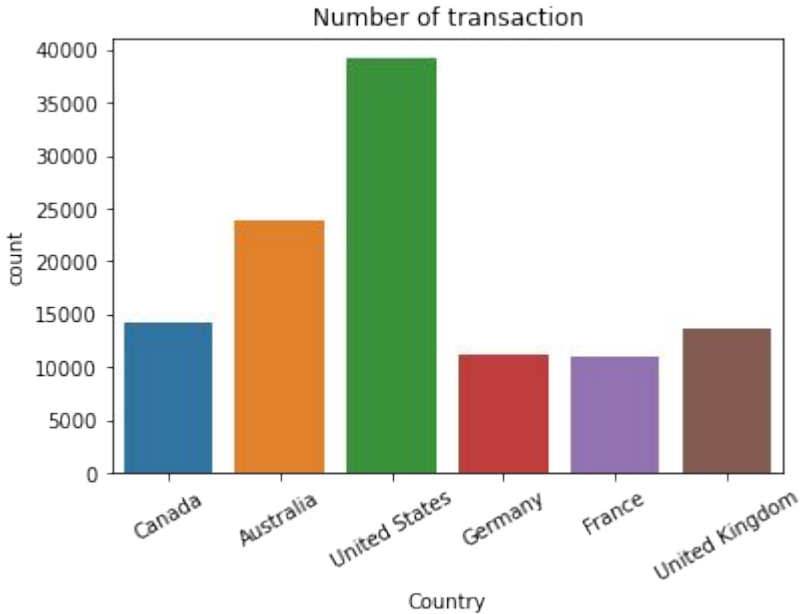


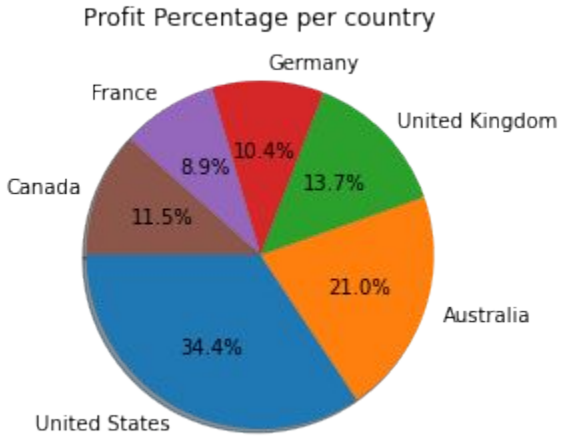


Bikes are 77% of our total cost, where Accessories and Clothing are around 11% each of our total cost. From all the calculated figure, we can see that Although accessories account for 10% of all cost, it makes up for 27% of our profit, which is remarkable. Thus this category is one of the main part of our business, that can be expanded even more.

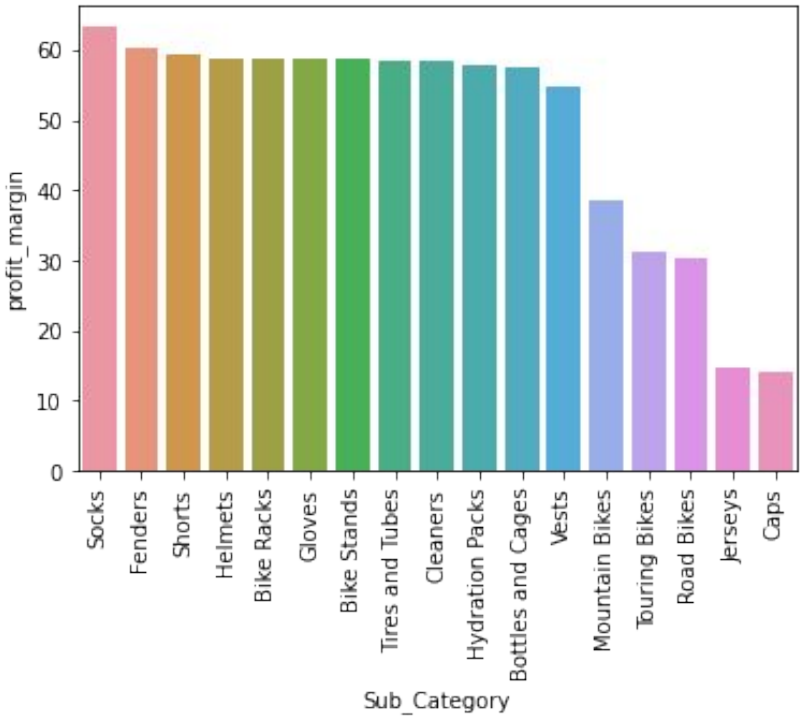
Distribution of Profit, Revenue Per Country

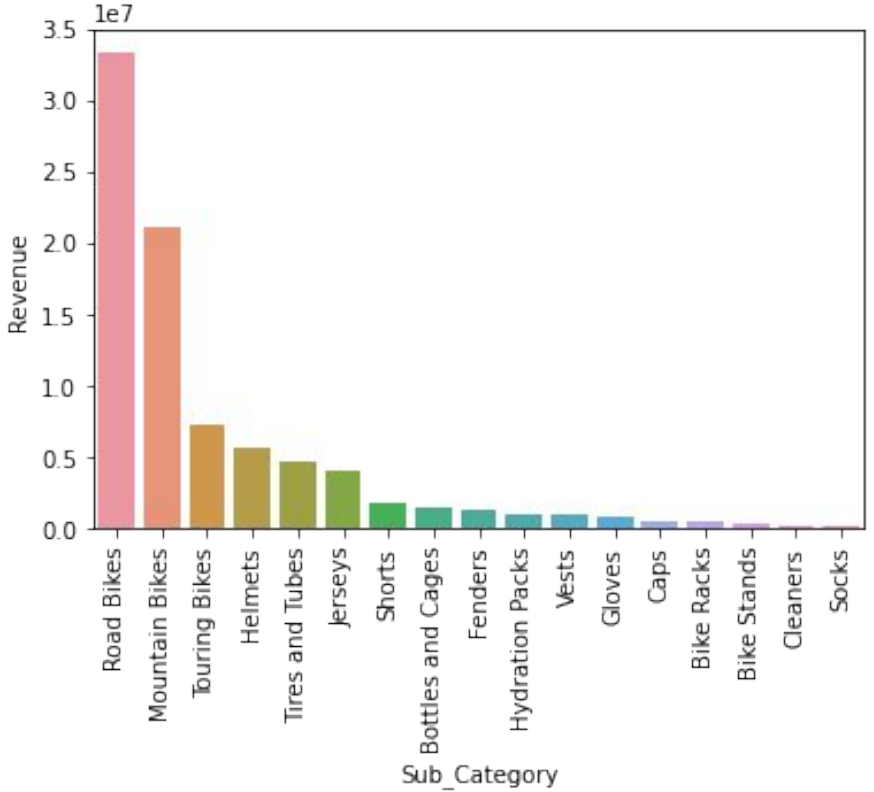






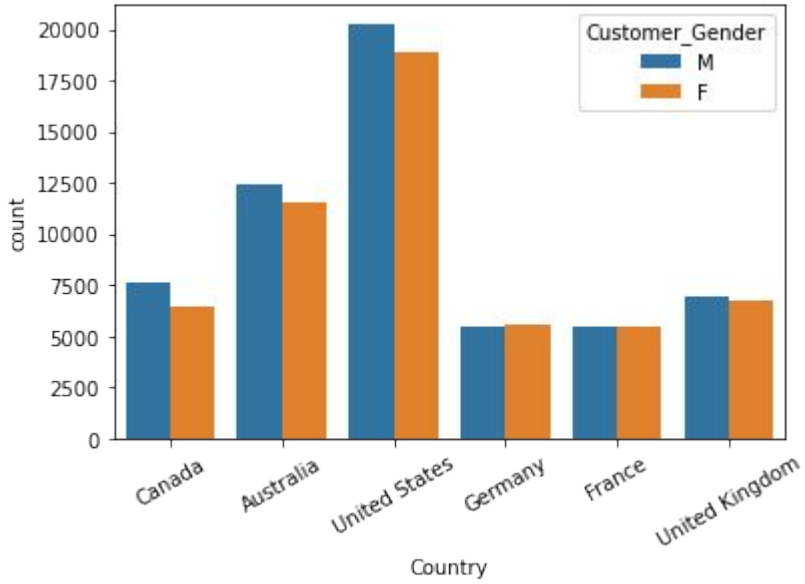
Revenue, Profit Margin per Sub-Category





We can see from the chart that socks has the highest profit margin and road bikes generates the highest revenue amongst sub-category products.

Gender Distribution Per Country



We can see Germany, France, UK, the gender distribution amongst our customers are about the same, where in US, Australia, Canada, our male customers are slightly more than female.

Top Ten Revenue Generating Countries/States

State	Country	Revenue
California	United States	17672620
England	United Kingdom	10646196
New South Wales	Australia	9203495
British Columbia	Canada	7877890
Washington	United States	6741510
Queensland	Australia	5066267
Victoria	Australia	5054839
Oregon	United States	3450410
Hessen	Germany	2073391
Saarland	Germany	2029545

California is on top of the list, with England and New South Wales being second and third, there might be potential for opening a retail store in those locations