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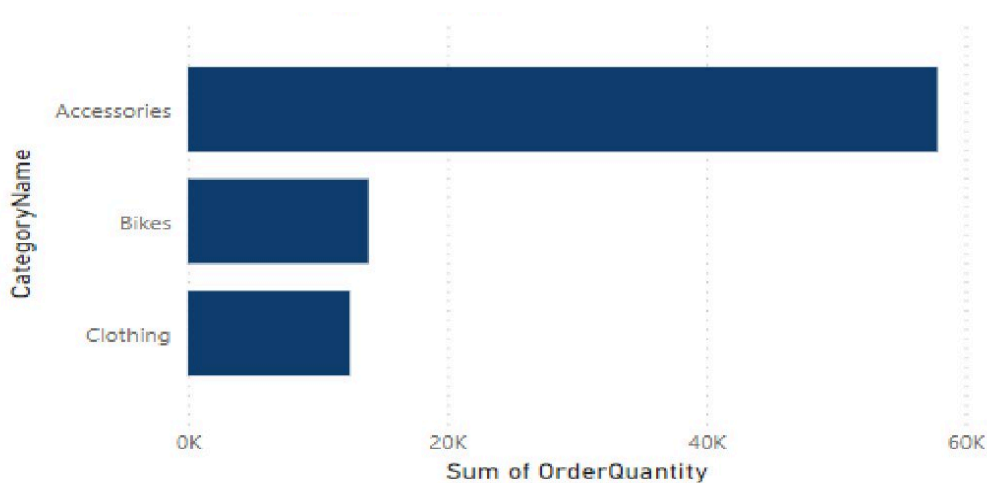
Sports-Goods Data Analysis Report

This report offers a comprehensive analysis of the sports goods market, emphasizing market trends, consumer preferences, and product performance to assist businesses in making informed decisions. Data on sales, customer demographics, category-wise profits, and gender-specific sales are analyzed to uncover growth opportunities.

This report is structured as follows: In the first section, we provide an overview of the sports goods industry and highlight key trends. The second section examines customer preferences. The third section focuses on product features and performance, with an emphasis on identifying opportunities for improvement.

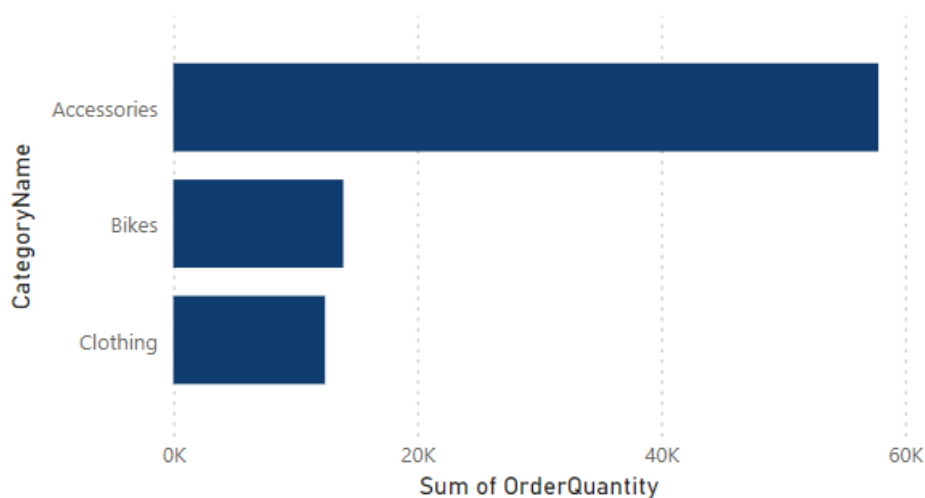
Analysis

The dataset includes four categories: Bikes, Components, Clothing, and Accessories. The plot displays the average price of goods in each category. It reveals that Bikes are more expensive compared to the other categories.



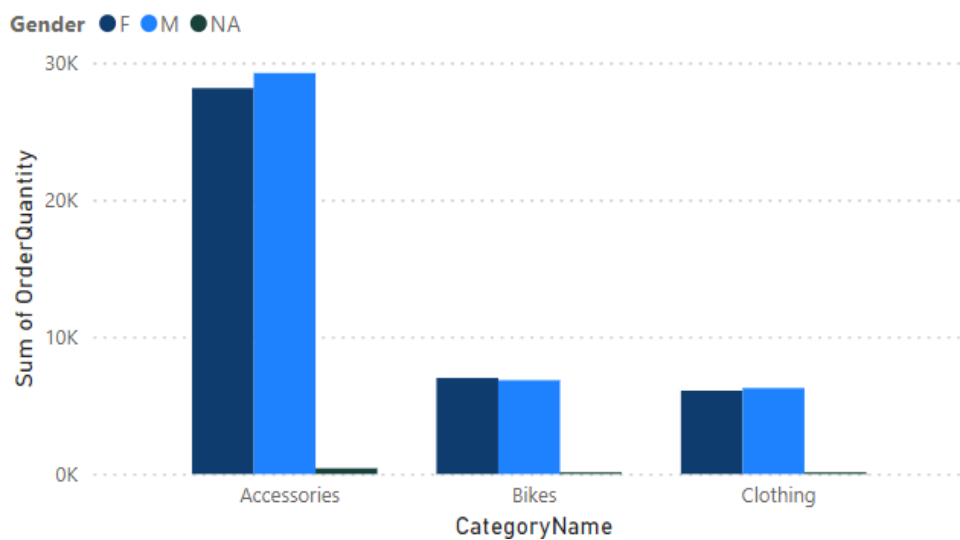
Now, let's examine the number of orders from each category. Despite the higher cost of goods in the Bikes category, it ranks second in terms of quantity of orders. Accessories, the least expensive items, are sold in larger quantities than any other category.

Order Quantity vs Product Category



Now, let's examine the gender-wise distribution of order quantity across these categories. From the following bar graph, it appears that the order quantity is approximately the same for each gender across all categories.

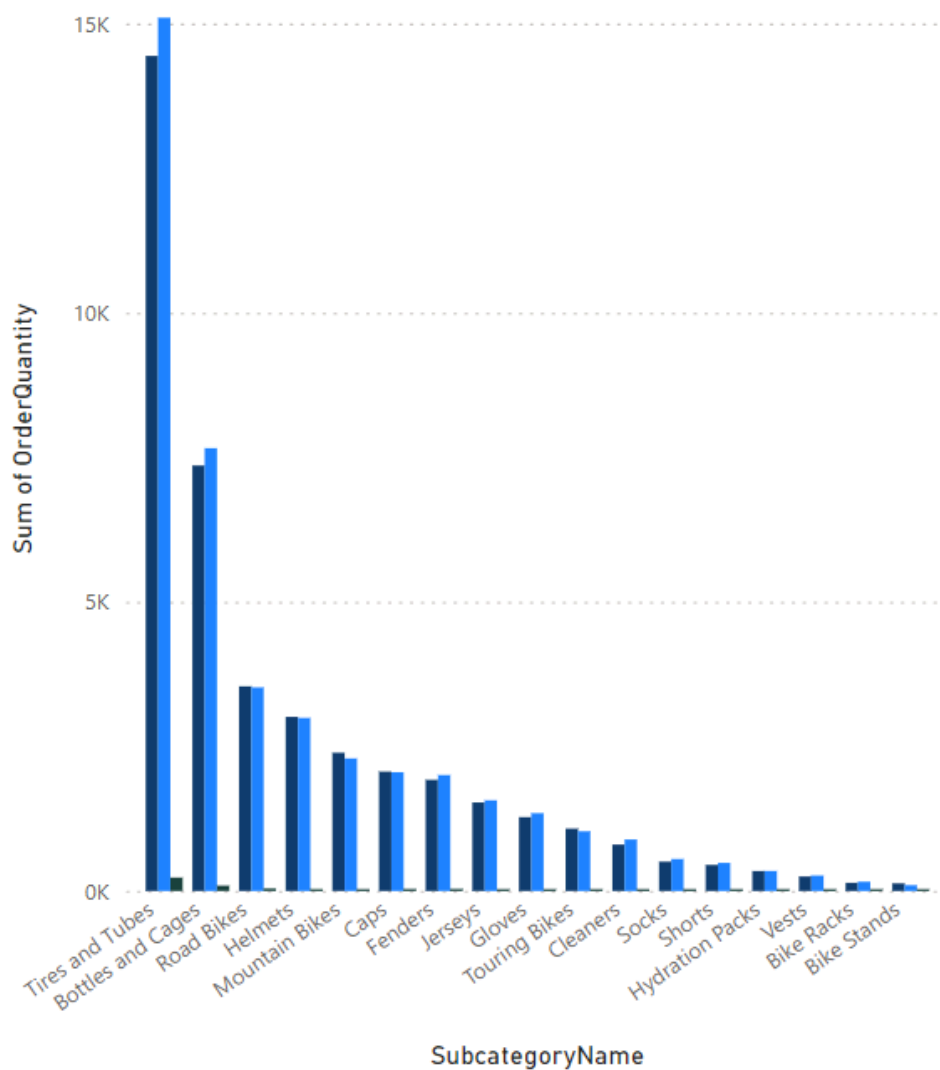
Order Quantity by Gender and Product Category



In Accessories and Clothing, male orders exceed female ones, while in the Bikes category, it's the opposite. Let's explore the gender distribution across subcategories within these categories. The graph indicates that gender distribution is roughly equal across all categories.

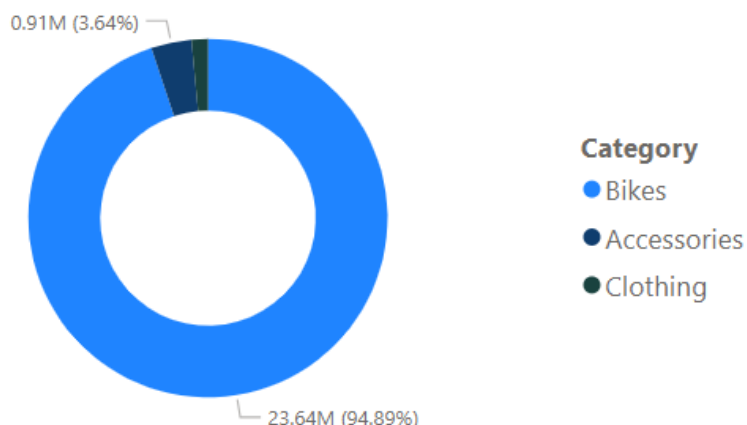
Order Quantity by Subcategory and Gender

Gender ● F ● M ● NA



We've determined the sales quantity in each category and sub-category, as well as the gender distribution across these categories. Now, let's examine the revenue generated by each category.

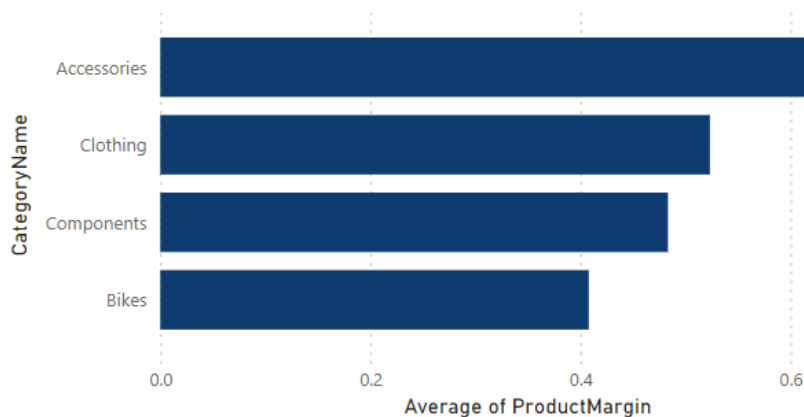
Revenue by Categories



The Donut chart reveals that the 'Bikes' category generates more revenue (94.89%) than the combined revenue from Accessories and Clothing. Despite higher sales of accessories, 'Bikes' emerge as the most significant category in terms of revenue.

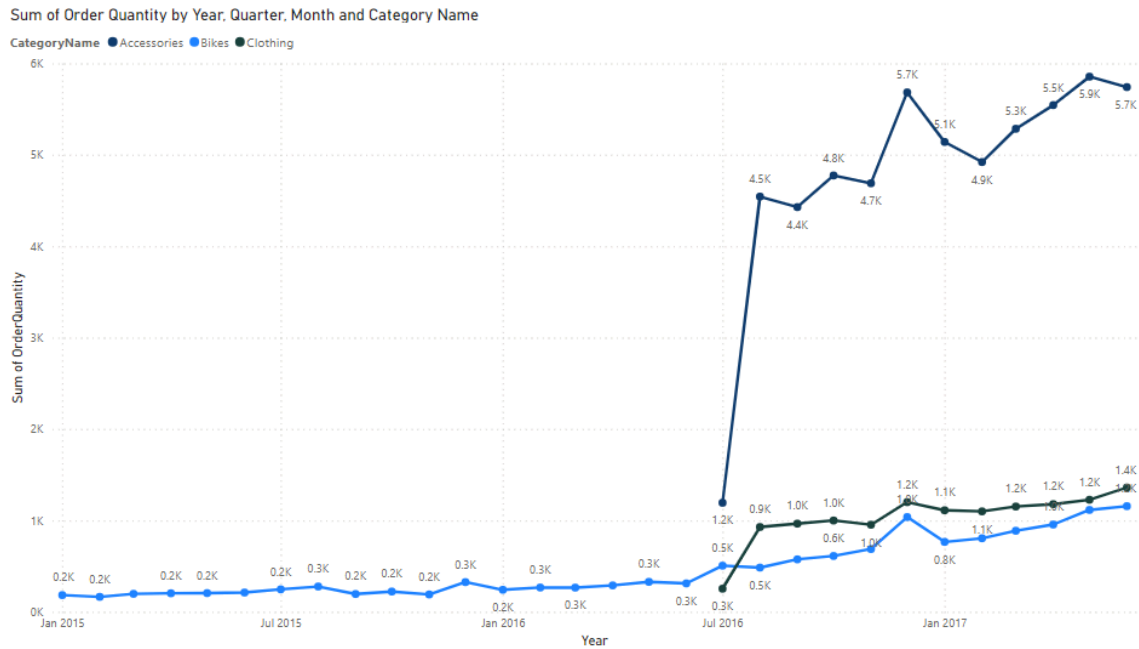
Now, let's check that Bikes are the more profitable in terms of Average Product margin

Product Margin by Category



Accessories have the highest average product margin, followed by clothing, components, and then bikes. Despite selling in smaller quantities and having the lowest average product margin, bikes are the most profitable due to their higher prices. On the other hand, accessories sell in higher quantities but have lower profitability due to their lower costs, despite having a higher average product margin.

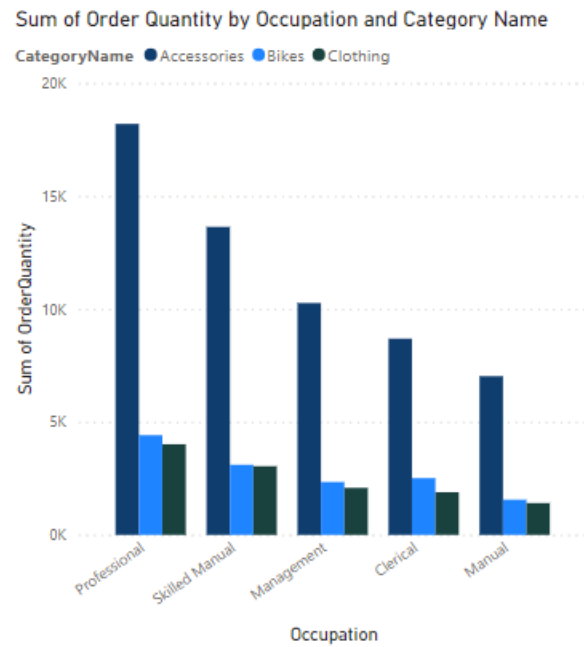
Now, let's examine how the time factor affects the sum of the order quantity.



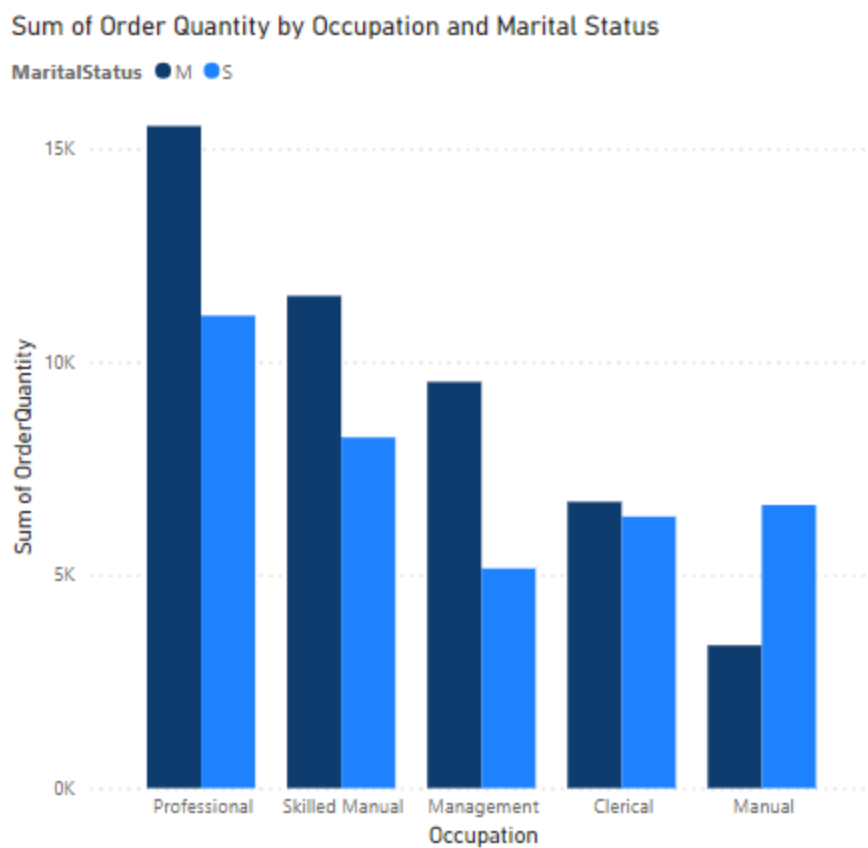
The quantity of bikes and clothing has been steadily increasing from FY-2015 to FY-2017. This trend suggests that the demand for products in both the bike and clothing categories will likely be higher in the next year compared to the previous year.

Now, let's look at the profession-wise distribution of the purchasing quantity of different categories.

Across all professions, Accessories are the top choice, followed by Bikes and Clothing.



Regarding marital status, married professionals, skilled manual workers, and management personnel tend to order more than their single counterparts.



Upon further examination, it appears that single individuals engaged in manual work tend to place more orders compared to their married counterparts.

In conclusion, analysis of marital status, occupation, gender, and periods reveals clear patterns that can guide targeted marketing efforts and product offerings.