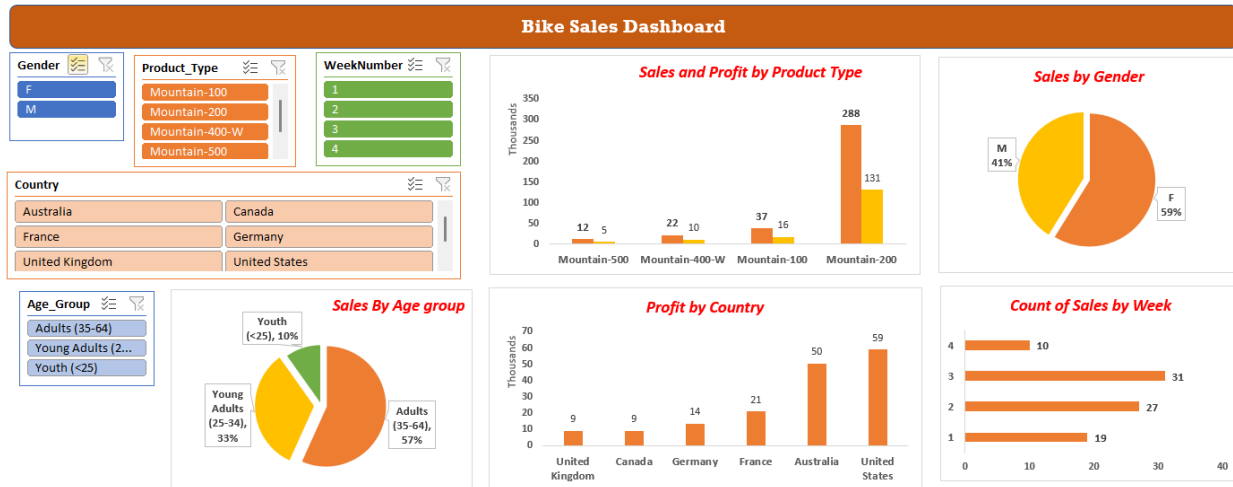


Bike Sales Data Analysis With Excel



1. Data Source – Bike Sales - <https://www.kaggle.com/code/stolltho/eda-hypothesis-testing-bike-sales/input?select=Sales.csv>
2. Created a backup of the original sheet and named it Working then applied the following transformations.
3. Deleted calculated columns (Cost, Revenue) from Working sheet.
4. Normalization - Created another sheet called Products with unique Products and Unit_Cost and Unit_Price. This was done to reduce the redundancy in the data.
5. Then using XLOOKUP, the Product details were populated into the Working sheet and later the Product ID column was deleted.
6. From Working sheet, I removed blank record, duplicate record and separated Product_Description into Product_Type, Product_Color, Product_Size columns.
7. Converted Sales Numbers which was in text to Numbers format.
8. Data Cleaning – Removed rows that did not have Product Id, Order_Quantity, Day values.
9. Added a VBA script to calculate the week of month.

```

Rev 2 - All-VBA-US-BikeSales.xlsm - Module1 (Code)
(General) WeekOfMonth

Function WeekOfMonth(dateValue As Date) As Integer
    Dim firstDayOfMonth As Date
    Dim dayOfMonth As Integer
    Dim weekNumber As Integer

    ' Ensure that the input is a date
    If Not IsDate(dateValue) Then
        WeekOfMonth = CVErr(xlErrValue)
        Exit Function
    End If

    ' Get the day of the month
    dayOfMonth = Day(dateValue)

    ' Calculate the first day of the month
    firstDayOfMonth = DateSerial(Year(dateValue), Month(dateValue), 1)

    ' Calculate the week number
    weekNumber = Int((dayOfMonth - 1) / 7) + 1

    WeekOfMonth = weekNumber
End Function
    
```

10. Created all Pivot tables in PVSheet.
11. Created a Dashboard sheet that displays the graphs related to all the pivot tables in the PVSheet.
12. These interactive charts display the sales per Gender, per Product_Type, WeekNumber, Country, Age_Group. Using the slicers, different combination of data can be analyzed.
13. Below are the pivot tables that were placed in the Dashboard.

Gender	Sum of Sales	
F	210,919	
M	147,478	
Grand Total	358,397	
Product_Type	Sum of Sales	Sum of Profit
Mountain-500	11,590	5,265
Mountain-400-W	21,532	9,772
Mountain-100	37,150	16,258
Mountain-200	288,125	130,925
Grand Total	358,397	162,220
Age_Group	Sum of Sales	
Adults (35-64)	203,421	
Young Adults (25-34)	119,646	
Youth (<25)	35,330	
Grand Total	358,397	
Week_Number	Count of Sales	
1	19	
2	27	
3	31	
4	10	
Grand Total	87	
Country	Sum of Profit	
United Kingdom	9,072	
Canada	9,123	
Germany	13,636	
France	20,981	
Australia	50,326	
United States	59,082	
Grand Total	162,220	