



## *Project Proposal*

### *Bike Sales in Europe*

#### *Description:*

*This data contains bicycle sales in Europe and the relationship between leading profits with the age groups of the people and according to male and female and the needs that can be purchased when buying a bicycle and we can predict using machine learning future prices once the product is placed and therefore the machine will make the decision in setting the price*

#### *The dataset getting Kaggle website:*

*(Bike Sales in Europe | Kaggle)*

#### *Data:*

*In this dataset 113018 rows and 18 columns and main column is sales , in this columns Sales According to male and female or Products and number of each product and its sales.*

### *Goal:*

*The main objective is predict using machine learning future prices the product and the rate of revenue and the percentage of profits each year.*

### *Question :*

- 1-How much profits will be in five years?*
- 2-Who buys bikes more, males or females ?*
- 3-The percentage of profits in each of the European countries ?*
- 4-Which age group is the most bike rider ?*
- 5-The most years in which bikes were sold ?*
- 6-What are the most expensive types of bicycles in each country ?*

*well, going to find this through the dataset.*

### *Tools:*

*Numpy and Pandas for data manipulation , Matplotlib and Seaborn for plotting , Sklearn for preprocessing , Patsy, Scipy stats and Statsmodels .*