

# Future Sales Prediction



# *Future sales prediction*

## Future Sales Prediction (Case Study)

The dataset given here contains the data about the sales of the product. The dataset is about the advertising cost incurred by the business on various advertising platforms. Below is the description of all the columns in the dataset:

TV: Advertising cost spent in dollars  
for advertising on TV;

Radio: Advertising cost spent in  
dollars for advertising on Radio;

Newspaper: Advertising cost spent in  
dollars for advertising on Newspaper;

Sales: Number of units sold;

So, in the above dataset, the sales of  
the product depend on the  
advertisement cost of the product. I  
hope you now have understood  
everything about this dataset. Now in  
the section below, I will take you  
through the task of future sales  
prediction with machine learning  
using Python.



# METHODS OF FORECASTING FUTURE SALES GROWTH

## 1 Historical Average

This method is one of the simplest and easy to follow forecasting methods. This method requires analysis of the company's historical sales figure to get the sales growth trend which helps in predicting the future sales growth of the company.



## 2 Industry Growth

Industry growth analysis help in understanding the industry's overall growth. This method requires analysis of Company's (in the same industry) sales growth figure to get the industry growth. With the help of industry growth, we can calculate the company growth.

## 3 EIC Analysis

EIC Analysis is the abbreviation of economic, Industry and Company Analysis. Under Economy analysis, we will check how the economy has performed in the past, how is it performing in the present and how is it expected to perform in future.



# Future Sales Prediction using Python

Let's start the task of future sales prediction with machine learning by importing the necessary Python libraries and the dataset:

1

Import pandas as pd

2

Import numpy as np

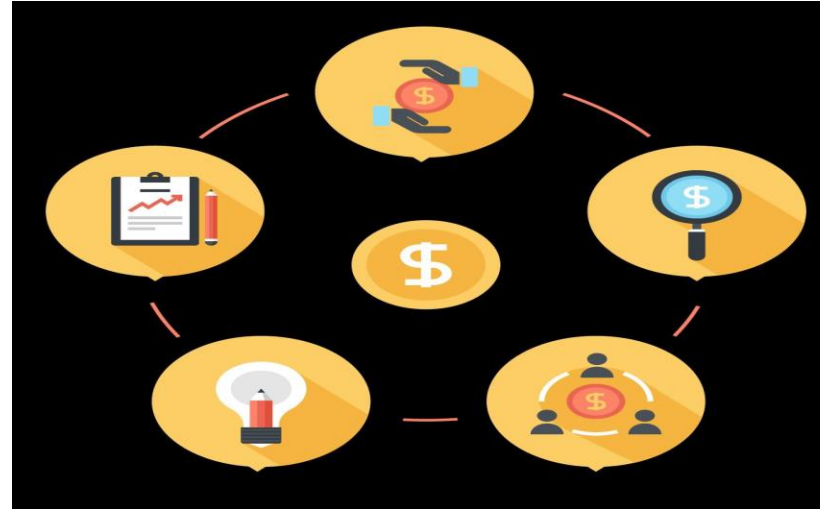
3

From sklearn.model\_selection import  
train\_test\_split

4

From sklearn.linear\_model import  
LinearRegression

5





6

Data =

```
pd.read_csv(https://raw.githubusercontent.com/amankharwal/Website-data/master/advertising.csv)
```

7

```
Print(data.head())
```

	TV	Radio	Newspaper	Sales
0	230.1	37.8	69.2	22.1
1	44.5	39.3	45.1	10.4
2	17.2	45.9	69.3	12.0
3	151.5	41.3	58.5	16.5
4	180.8	10.8	58.4	17.9

Let's have a look at whether this dataset contains any null values or not:

1

```
Print(data.isnull().sum())
```

```
TV      0
```

```
Radio    0
```

```
Newspaper  0
```

```
Sales     0
```

```
Dtype: int64
```

So this dataset doesn't have any null values.



**THANK YOU!**