**Advertising Sales Prediction**

**1.Problem Statement:**

When a company enters a market, the distribution strategy and channel it uses are keys to its success in the market, as well as market know-how and customer knowledge and understanding. Because an effective distribution strategy under efficient supply-chain management opens doors for attaining competitive advantage and strong brand equity in the market, it is a component of the marketing mix that cannot be ignored .

The distribution strategy and the channel design have to be right the first time. The case study of Sales channel includes the detailed study of TV, radio and newspaper channel. The predict the total sales generated from all the sales channel.

**2.Data Analysis:**

To work on any machine learning project,we need to import basic libraries such as pandas, numpy, some visualization libraries such as seaborn and matplotlib,while working on data,it give some warnings, such warnings can be ignored,

import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

import seaborn as sns

import warnings

warnings.filterwarnings('ignore')

Pandas and numpy(numerical python) are libraries used for data analysis, and doing machine learning task, by using this libraries we can do data cleaning,data merging,operations on rows and columns,it means operations of dataframe, in dataframe operation we need some common operation such deletion or insertion of any row or columns, coversion of one data type to another data types.Numpy is used for mathematical operations on array which consumes less memory. Matplotlib is 2D data visualization library.its coding is similar to Matlab.Data can be easily analyzed by Matplotlib using python libraries such as pandas and numpy.Seaborn has less syntax and default themes,seaborn graphics is more beautiful than Matplotlib and avoid overlapping of plots with the help of themes