**PROBLEM & BACKGROUND:**

Marketing campaign data of 2,240 customers of Maven Marketing, including customer profiles, product preferences, campaign successes/failures, and channel performance.

Result of analysis is to describe various elements of our target audience- demographic and psychographics- and discovering better channels to improve future sales. By this way we can determine patterns, relationships or trends.

**SOULUTION:**

* Yes, There are 24 null values found in the income column. Income column is a numeric type, so we preferred the avg method. Income values are categories based upon their education designation. And avg. values are replaced with null values.
* Customer’s education, marital status, income and birth year are significantly related to the number of web purchases.
* Response marketing campaign was the most successful.
* Customer’s demography is dependent upon a few factors like education, marital status, income and year of birth.

According to our analysis it was concluded that the customers graduated and earned more than >50000. Most are married and born between 1963-1982.

* Wine products are performing best.
* Deal purchases is an underperforming channel.

**METHODOLOGY & PROJECT SCOPE :**

* Aim of this project is to make the calculation simpler and prepare summarised data.
* The dataset followed different Excel functions to summarise the data. In order to, we follow a pivot table, which calculates, summarises, analyses the data that lets you see comparisons, patterns and trends in our dataset.
* We used a pivot chart to create an understanding visual representation. These graphs are given information regarding the dataset.
* Null values means blank cells in a sheet, and outliers means if range between two values becomes high.There are many ways to solve these issues, it partially depends upon the dataset types.

Ex: If it is a numerical data then we can fix it by using avg of the attribute.

If it is string type, then simply take frequency (mode) and replace it with null values.

**GOALS & KPIs:**

* Are there any null values or outliers? How will you handle them?
* What factors are significantly related to the number of web purchases?
* Which marketing campaign was the most successful?
* What does the average customer look like?
* Which products are performing best?
* Which channels are underperforming?

**CONCEPTS USED & FORMULAS:**

* To summarise the dataset, we used a pivot table.
* For analytical calculation, we preferred count, max,min, sum, VLOOKUP, % formulas functions etc.
* For the graphic presentation we followed charts.

**CONCLUSION:**

Marketing campaign data of 2,240 customers of Maven Marketing, including customer profiles, product preferences, campaign successes/failures, and channel performance.Result of analysis is to describe various elements of our target audience- demographic and psychographics- and discovering better channels to improve future sales. By this way we can determine patterns, relationships or trends.

It was concluded that, most of the customers are from graduate background, and married. Among all the products, wine was the most profitable. 50 % of the amount earned from the wine. Companies should be focused on different channels' performance. The main 3 components are required for a company's flexibility i.e. consumers, products, platforms and a chain set who combined all these three components.