**Project -1 SALES INSIGHTS FOR A HARDWARE COMPANY**

**Problem Statement**: Understand the **Sales** and **Performance** of different branches the company from unstructured raw data.

**Approach:**

* After the data was collected in the **SQL** database basic **queries** were used to understand the **relation between the tables** of the data.
* Then it was **connected** to the **Power BI** and the **query editor** was used for further observation of **Null values**, **blanks, duplicates** and were cleaned as necessary.
* Using the **Star schema** data model, the **relation** was established between the Tables in the data.
* **DAX language** was used to write few **Basic Measures** like **Total Revenue, Total profit %** Market-wise and as a whole and few **conditional columns** were added.
* The data was loaded for **visualization** and designing the **Dashboard**. Using different Visual tools, the dashboard with the requested information was presented.

**Insights:**

* The Dashboard was further broken down to three reports of Sales, Profit and Performance categories to simplify the Insights.

1. The sales and the Order Qty. were good with Delhi NCR while the markets like Bengal and Patna were underperforming.
2. Our top performing client is **“Electricsara Store”.**
3. **“Nixon”** had been the underperforming client.
4. **\* Delhi has good Sales and Good Revenue but the Profit contribution from it is less compared to the other market’s individual Profit shares.**
5. The major Customer that fetches the highest profit are the **Brick and motor** having a share of almost **79.55%.**

**Learnings:**

* **Sales and Performance** trend, Market Analysis from previous year to the present year.
* Writing basic **SQL queries** for and Data Visualization methods in **Power BI**.

**Project -2 TELECOM CHURN ANALYSIS**

**Problem statement: Churn data** for a Telecommunications company that provides phone and internet services to 7,043 customers in California, requests a Dashboard of **Customers Churned**, **joined** and **stayed** in the last quarter, **Churn Retention Analysis** and Inferences and Insights from the data.

**Approach:**

* The data was in a csv file format. After the hands on the data, it was taken to EXCEL for the **basic cleaning and preparation** process like **removing duplicates, errors and blanks.**
* Then it was **connected** to **Power BI** for further analysis and designing the Dashboard. Various visualisation tools were used to make the Analysis look simple yet effective for the client to understand.

**Observations:**

The **Inferences** and the **Insights** from the visualizations of the data are:

* The Gender, Martial Status does not play a big role in Churn or stay analysis.
* The city **San Diego** has the **highest** number of **Churn**ed Customers with strength of 185 and loss of 385.4k $, followed by **Los Angeles** and **San Francisco**.
* Out of all the contact types, the **highest Churners were Month to Month** type.
* The **total Loss of Revenue** from Churning is almost **18%** on whole.
* Most of the **Churners** were of **less Dependency** having less than three Dependents.
* The **Main reason** stated for Churning was the **better options provided from the Competitor**, followed by the **Dissatisfaction and Attitude** of the Team.

**Learnings:**

* Customer retention can be achieved with good customer service and products. It is best to **research more** about the **competition** and introduce plans or offers in order to reduce the Churn rate.
* The team must be trained on **Professional behaviour with the Customer** in order to have a **smooth Customer relationship.** Better Offers must be provided to the **Less dependency group** and the **people of age below 20** must be given good discount and attractive packages as those are into **high-risk category.**
* The **Month-to-Month Contract** must be adjusted with new terms and the **Offer E** has to be revised as they are having the **High Churn rate**.