CV Writeup

Sales Insights – Brick & motor business [Power BI | SQL]

• Designed a Power BI dashboard to understand AtliQ hardware goods sales trend.

• The final dashboard was effective at displaying the sales trend of AtliQ hardware, allowing users

to understand the data and make informed decisions.

• This dashboard could help in increasing the revenue at least by 7% in the next quarter.

Data : https://github.com/codebasics/DataAnalysisProjects/tree/master/1\_SalesInsights (codebasics)

The project was mainly a Resume Project Challenge by CodeBasics, and the dataset was provided by CodeBasics as a SQL dump file.

The data set is based on the sales of a computer hardware supplier named AtliQ Hardwares' in different regions of India for the last 4 years.

There was an YoY decline of sales, so the Stakeholders of the company needed to find the root cause of the declining sales. So instead of

going through the datas in the excel files of each store of each region they wanted a proper visualization of the whole data in one place .

As a result the Managers and Satakeholders can easily find out where they are losing money , why their sales are droping and in which region ,

along with their best selling poroducts.

Now as the data was given as an SQL dump file , we loaded the data in our database and checked for any anomalies in the data . While doing so we

found that some of the regions had no values where as though there were sales still the amounts were either zero or negative values . Also we

found that some sales were in USD while maximum sales were in INR . After identifing these anomalies in our data we connected our database with

Power BI to transform those anomalies and further data analysis.

In the Power BI after transforming the amonalies , I then moved on to the data modeling tab for creating relationships between the table.

In the data modeling tab I focused on building a normalized model to reduce data redundancy and improve data integrity . For better understanding

I keep the lookup tables above the data tables so that I understand the downstream filter flow. I used 1 to many relationship with 1 way filtering

to reduce complex cross filtering. Then I hide the foreign keys in the data table from report view to prevent invalid filter context.

Then I move on to creating DAX which is the formula brain of Power BI . Creating DAX helps us to visualize data in more granular way. I have divided

this into 2 parts , firstly to create Calculated Columns and then creating some Measures. Calculated Columns helps to stamp fixed static values in our tables

where as Measures create calculated values which only appears in the visualisation and are not stored in the table. Like in this case I made a calculated column to

convert those price which were in USD to INR.I even created simpliest of Measures which were available to as Implisit Measures so that I can use that in creating

complex Measures. I also created some Measures to find our different parameters of our sales. Like Total Profit Margine , Total Sales in terms of quantity , total

revenue, along with Profit Margine Contribution % , Profit Margine % , and Revenue Margine %.

Key Insights :

In this page I mainly focused on the key metrics of the business showcasing the total revenue,sales quantity , revenue by market, sales by market ,along with

revenue trend and top 5 products and customers based on revenue . I have also added 2 slicer giving access to the year and months which will help in jumping to

a particular month of an year. I can see that there is a sharp decline in the revenue since the first year , so further investigation is needed to find the

reason behind the downfall.

Profit Analysis:

To further find the revenue decline , I have created a separate report on the Profit where along with the revenue trend graph, yearly and monthly slicer ,

I have added bar charts showcasing profit % by market,Profit Contribution % by market , Revenue % contribution by market and also added a matrix to showcase

the breakdown by customers.By doing this I found out that in some store where Atliq is giving products at low profit % margine, those stores are

contritibuting more profit % , where as some stores where Atliq is giving products at negative profit % margine , those stores are contributing least profit %.

So, maybe Atliq needs to take some steps which can increase Atliq's revenue .

Performance Insights:

To find the performance of the company in diffrent regions I then created another page focusing on the regional revenue and profit change with the previous year

revenue .So to get that I created a line and clusted column chart showcasing the revenue of that year along with revenue of previous year and displayed the

profit margine % of this year. I also created a bar chart showcasing the zonal profit margine and added a slider using what if parameter to set the profit target %

and to see which of Atiq's zone / market / product qualifies the target profit %.