UNLOCKING BUSINESS POTENTIAL "Business Insights 360"

About the Company:

AtliQ Hardware is a leading company in the hardware industry, specializing in providing high-quality products to meet the needs of its customers. The company is dedicated to innovation and delivering reliable solutions that enhance operational efficiency for businesses across various sectors. AtliQ Hardware offers a comprehensive range of hardware products catering to different industries. AtliQ Hardware collaborates with a network of channel partners to extend its reach and provide seamless solutions to its customers. These partners play a crucial role in distribution, support, and customer engagement, enabling the company to maintain strong market presence and deliver superior service to clients worldwide.

Problem Statement:

The sales director faces challenges in tracking sales and understanding the business's performance. This initiative aims to outpace competitors in the market and enable data-driven decision-making. The project is expected to address stakeholders' questions across various aspects and provides insights like sales quantity, revenue, profit, profit margin, top customers, top markets, and revenue trend.

I worked on this project as part of my Power BI course from Codebasics

Tech Stack

- SQL
- Power BI Desktop
- Excel
- DAX
- DAX Studio (For Optimizing Report)

What did I learn?

- Basics of Power Bi
- Questions to be asked before the project
- Stakeholder Management, Stakeholder Mapping Analysis
- Importing data from SQL, Excel
- ETL (Extract, Transform, Load)
- Creating measures using DAX
- Creating Calculated Columns
- Data Modelling [Star Schema, Snowflake Schema]

- Using Bookmarks to switch between visuals
- Creating tooltip
- Page Navigation with buttons
- Creating date table using M language
- Dynamic Titles based on applied filters
- Choosing the right visuals
- Power Bi Services
- Publishing the dashboard to Power Bi Services
- Optimizing Report Using DAX studio
- Query folding
- Data validation techniques
- Supply Chain Basics

Business terms:

- Gross Price
- Pre-invoice deductions
- Net Invoice Sales
- Post-invoice Deductions
- Net Sales
- Cost of Goods Sold (COGS)
- Gross Margin
- YTD (Year To Date)
- YTG (Year To Go)
- Net Error
- Abs Error
- Forecast Accuracy

Knowing The Data:

Understanding the dataset before starting data analysis is extremely important, as it lays the foundation for effective and accurate insights.

<u>Dimension Table</u>: A dimension table contains **descriptive attributes** (also known as metadata) that provide context to the facts in the fact table.

<u>Fact Table</u>: A fact table contains **quantitative data** or **metrics** that can be measured and analyzed. It forms the **core** of a star schema and is often surrounded by dimension tables.

In this project we have 2 databases gdb041,gdb056

<u>qdb041:</u>

dim_customer : This table contains customer_code,customer,platform,(Brick & mortar ,
online store) , Channel(Retailer,Direct,Distributor)

dim_market : This table contains sub_zone,
region(APAC,EU,LATAM,NA),market(ex:India,China,Japan)

dim_product: This table contains product_code,division,segment,category product, variant.

fact_forecast_monthly: This table contains data related to predictions or forecasts for a specific period, broken down by month.

fact_forecast_sales: This table aggregated sales data for analysis on a monthly basis.

gdb056:

freight_cost: This table contains travel cost, other costs for each market within the fiscal year.

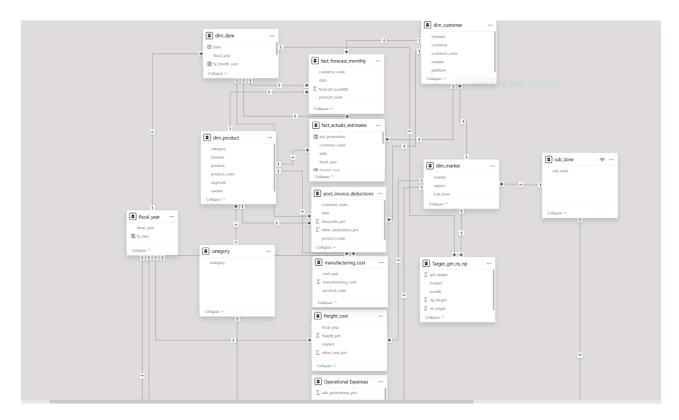
gross_price : This table contains gross_price with fiscal_year and product_code

manufacturing_cost: This table contains manufacturing costs.

post_invoice_deductions: This table contains post invoice deductions and other deductions.

pre_invoice_deductions: This table contains pre invoice deductions for each customer.

Data Modelling:



After importing the data from SQL into Power BI, the data modeling process followed the **Star Schema** and the **Snowflake Schema**, depending on the specific needs of the analysis.

Dashboard Designing:

Home View



Finance View



Sales View:



Marketing View:



Supply Chain:



Executive View:

