In this project I’ve simulated a business problem resolution to a hardware company in India.

**AtliQ Hardware :**

- Is a company which supplies computer hardware and peripherals to many clients across India;  
- The company has a head office in Delhi and regional offices throughout India.

**Business Issue :** The marketing is growing dynamically and then he’s struggling in terms of tracking the sales, needing more accurate insights into the company sales, and then taking the necessary decisions.

**The scenario:**  
The sales director need to know how the sales are going in all operations and the information provided by the regional sales managers are not being enough.  
Just hearing the numbers or receive tons of excel files is far from being effective in terms of having a reliable overview of the business.  
Instead, he want to be able to look at the data and understand what’s going on right away.

**Solution:**  
Create a simple and informative dashboard about the company sales.

I used SQL queries in MySQL Workbench to investigate the data and Tableau for *ETL* and visualizations to create the insights.

**Overview :**

* After a quick data exploration in MySQL, here are some initial findings:
* The database contains 5 tables: customers, date, markets, products, and transactions.
* There are 17 markets, 279 products, and 38 customers.
* The observation period is from January 2018 to June 2020.
* The total revenue in 2020 was $ 142,23 Mi, 42% less than 2019, which was $ 336,45 Mi.
* Most of the transactions data are in INR currency, but we have 4 records in U$ currency.  
  And we got Paris and New York on the “sales markets” table. We’re going to deal with it in the ETL process.

**ETL (Extract, Transform, Load) :**

Once I knew the basic features of the data I must work with, I imported the MySQL database into Tableau to do the necessary transformations and end up with a simple, reliable, and useful dashboard.

**Data Modeling Step** :  
We got five tables, and we need to ensure that the tables are correctly connected.

[sales transactions] — main table  
**TABLES CONNECTED**  
- sales customers > connected by “customer\_code” column;  
- sales date> connected by “date” column;  
- sales products > connected by “product\_code” column;  
- sales markets > connected by “market\_code” column.

**Measures Created** *:*“Revenue” and “Sales Qty” measures to get the sum of each column instantly in the dashboard.

**Filtering:**Once the company is operating only in India, I filtered out “Paris” and “New York” in the sales markets table by unchecking the “(blank)” field in the “zone” column.

**Cleaning and adding new column**The “sales\_amount” column has -1 and 0 values. I removed them in this case so we can see only the actual sales numbers on the dashboard (sometimes “0” means promotional sales and giveaways, but to know that we should have further information, which is not the case of this project). I found out that the “currency” column (sales transactions table) has 4 USD currency values, 2 of them with hidden characters, so i had to include an argument into the conditional formula, to create a new column called “norm\_sales\_amount”, where it converts the USD currency value into INR currency value.

After all the analysis and transformation, my data is reliable enough to build the dashboard:

The dashboard shows all the main information about the company sales, such as Revenue, Sales Quantity, Revenue and Sales by Market, Revenue Trend, Top 5 Customers and Top 5 Products.  
It can be filtered by YEAR and MONTH inside the observation period, so the sales director can have a deeper and quick view of the sales to support his decision-making process.