# *Bicycle Sales Analysis*

Dashboard explanation

This dashboard provides actionable insights to the sales team and stakeholders. It intends to help the data-driven decision-making process, encouraging people to analyze trends, sales performance, most sold products, most important clients, and top players within the organization.

Data collection and data cleaning

Tables in database were exported to csv files to simplify the connection to the data. Then, connection to these csv files was made with power query. Since data was already cleaned, there was no need to make any data cleaning.
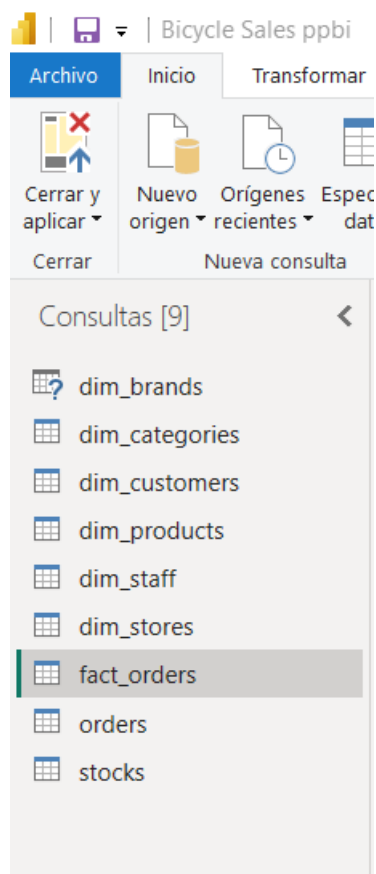
Data modeling

I used a snowflake schema where fact orders act as the central table, with several dimensions' tables that aims with context and iterations over descriptive elements.
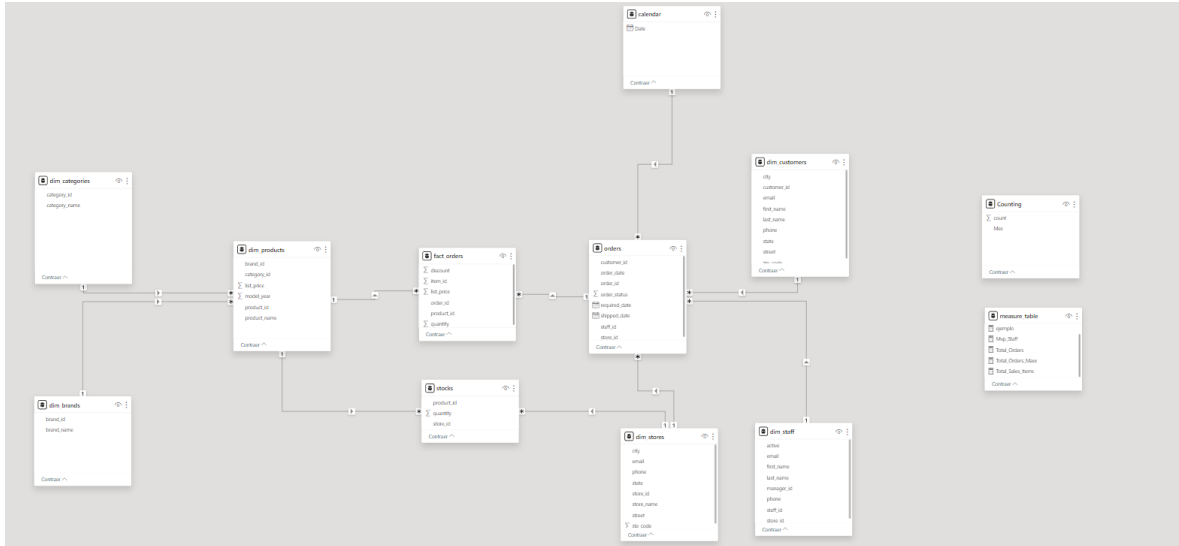
DAX expressions

I used aggregation expressions like SUMX and COUNT, as well as other expressions like TOPN, VALUES, MAXX and SUMMARIZE. The intention was to use the less DAX expressions as possible as to be more efficient.

MAXX + SUMMARIZE

```
Total_Orders_Maxx =
--SUMMARIZE(orders,orders[customer_id],"count",COUNT(orders[order_id]))

--MAXX(measure_table,COUNT(orders[order_id]))

MAXX(
    SUMMARIZE(orders,'calendar'[Date].[Año],'calendar'[Date].[Mes],"Counting",COUNT(orders[order_id])),
    [Counting]
)
```

TOP N

```
1  Mvp_Staff = TOPN(1,VALUES(dim_staff[first_name]),[Total_Orders])
```

COUNT

```
1  Total_Orders = COUNT(orders[order_id])
```

Data visualization

Visualizations were selected to highlight the most important brands, categories, and stores. A mixed of cards, line plots, bar plots and pie charts were utilized. The preferred color was blue, using red color to gain attention on the top of each graph.
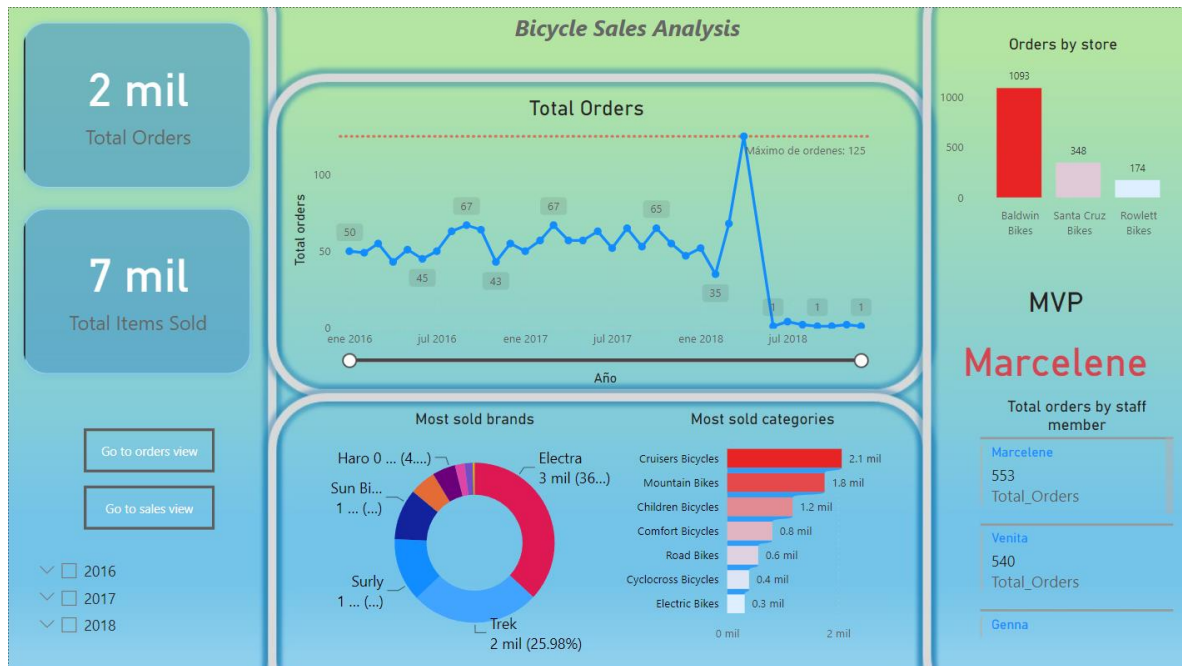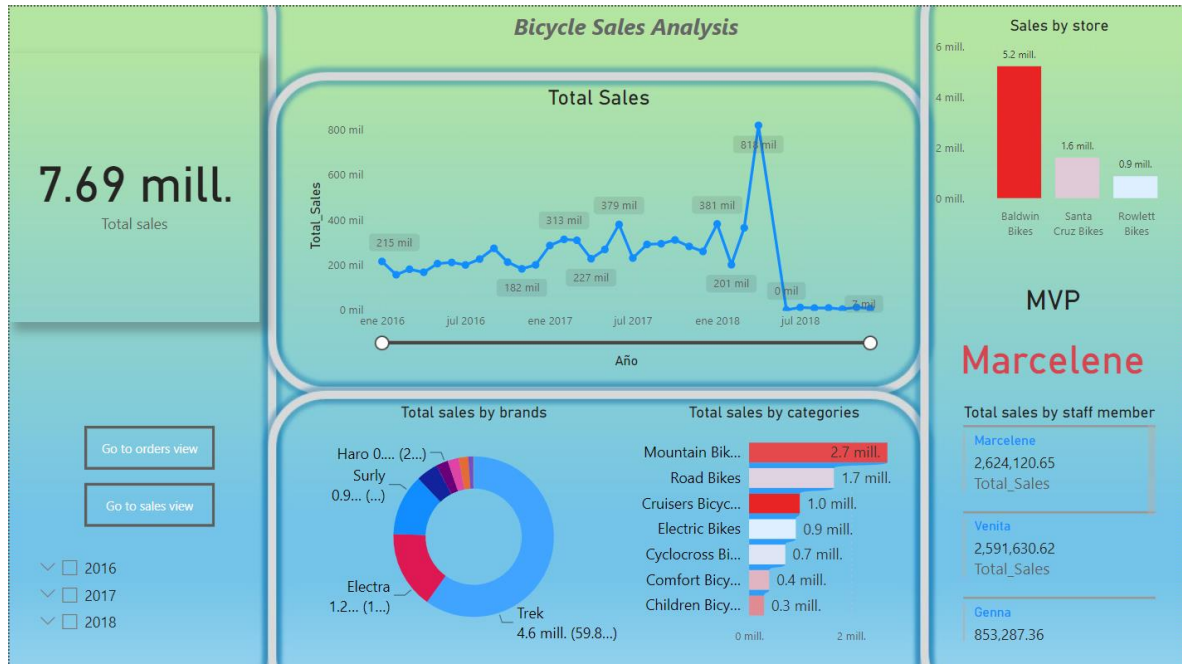
Insights

1. As shown in the dashboard, historically, sales reached their highest point in April 2018. Surprisingly, in the same year, orders decreased by half compared to the previous year.
2. Electra, Trek and Surly are the most sold brands (by units sold), but Trek itself represents almost 60% of the total sales.
3. Baldwin Bikes is the most important store for the company, generating the most orders. This makes sense considering this store attends 70% of the total customers.
4. Cruisers bikes is a popular category, but mountain bikes make itself more than 2.7 million in sales.
5. Marcelene leads sales and orders.