# RYHA STORE PROJECT

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# INTRODUCTION

- Ryha Store is a footwear store located in Tangerang Selatan, Banten
- offer a wide range of products from both local and international brands
- Engage in sales through both offline and online channels

# PROJECT SCENARIO

| | |
|---|---|
| The Brief | • The management team is looking for a solution to monitor key performance indicators (**KPI**) such as sales, revenue, profit, and cost.<br>• Additionally, they need to be able to analyze the **geographical locations** of product sales |
| The Objective | • Manage and store raw data in a **MySQL database**<br>• Connect MySQL database to **Power BI Desktop**<br>• Explore the dataset and analyze it with **DAX**<br>• Design an interactive **dashboard** to visualize the data |

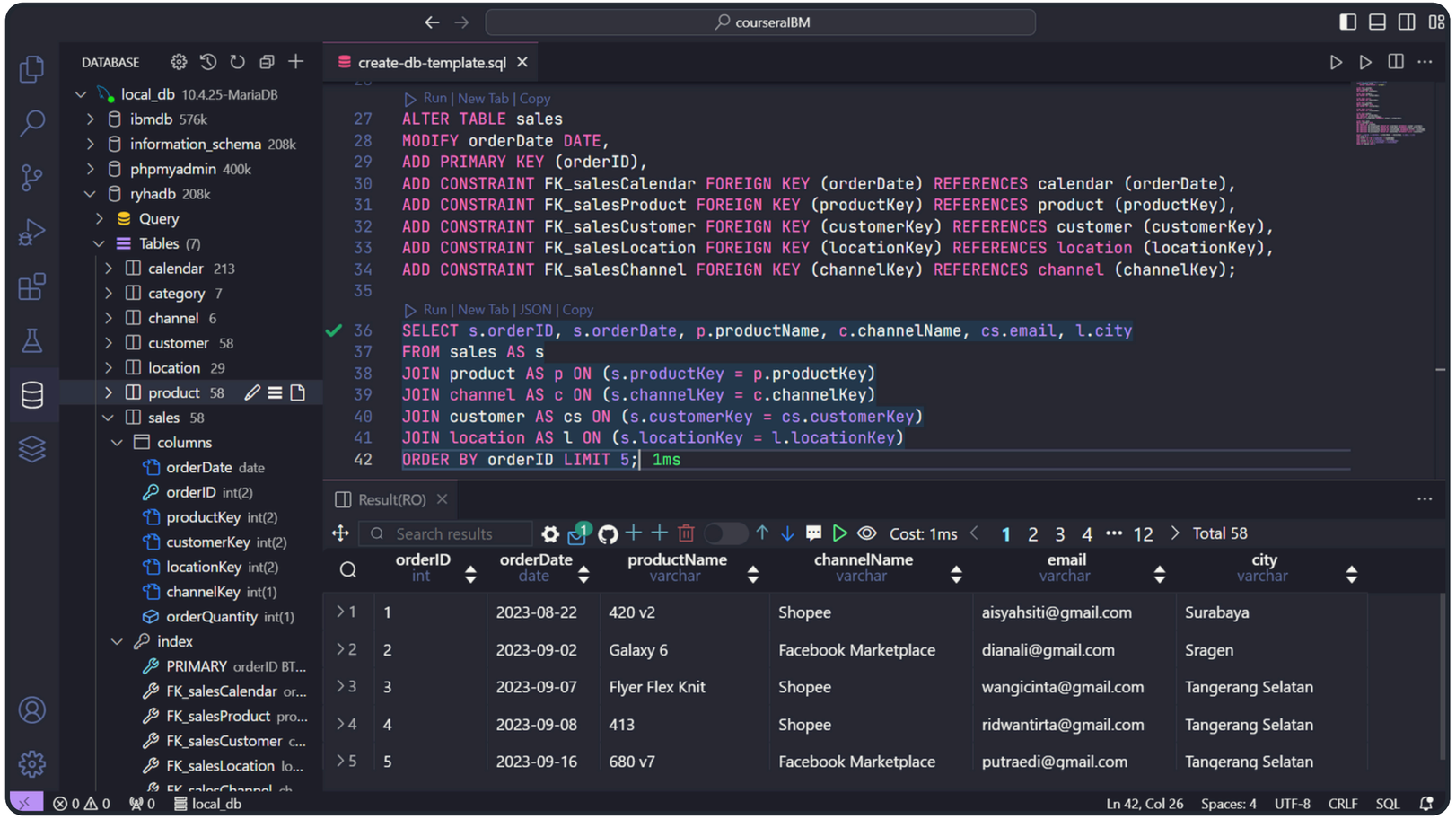
# SETUP

## Three Key Questions

| Question | Answer |
| --- | --- |
| What **type of data** are you working with? | • Time-series<br>• Categorical<br>• Financial |
| What do you want to **communicate**? | • Description (Card, KPI, Matrix Table)<br>• Comparison (Bar Chart, Line Chart)<br>• Distribution (Map) |
| Who is the **end user** and what do they need? | • The Executive (Establish clear, top-level KPIs to monitor business performance and health) |

# MYSQL DATABASE

1. Store dataset from CSV file to MySQL database

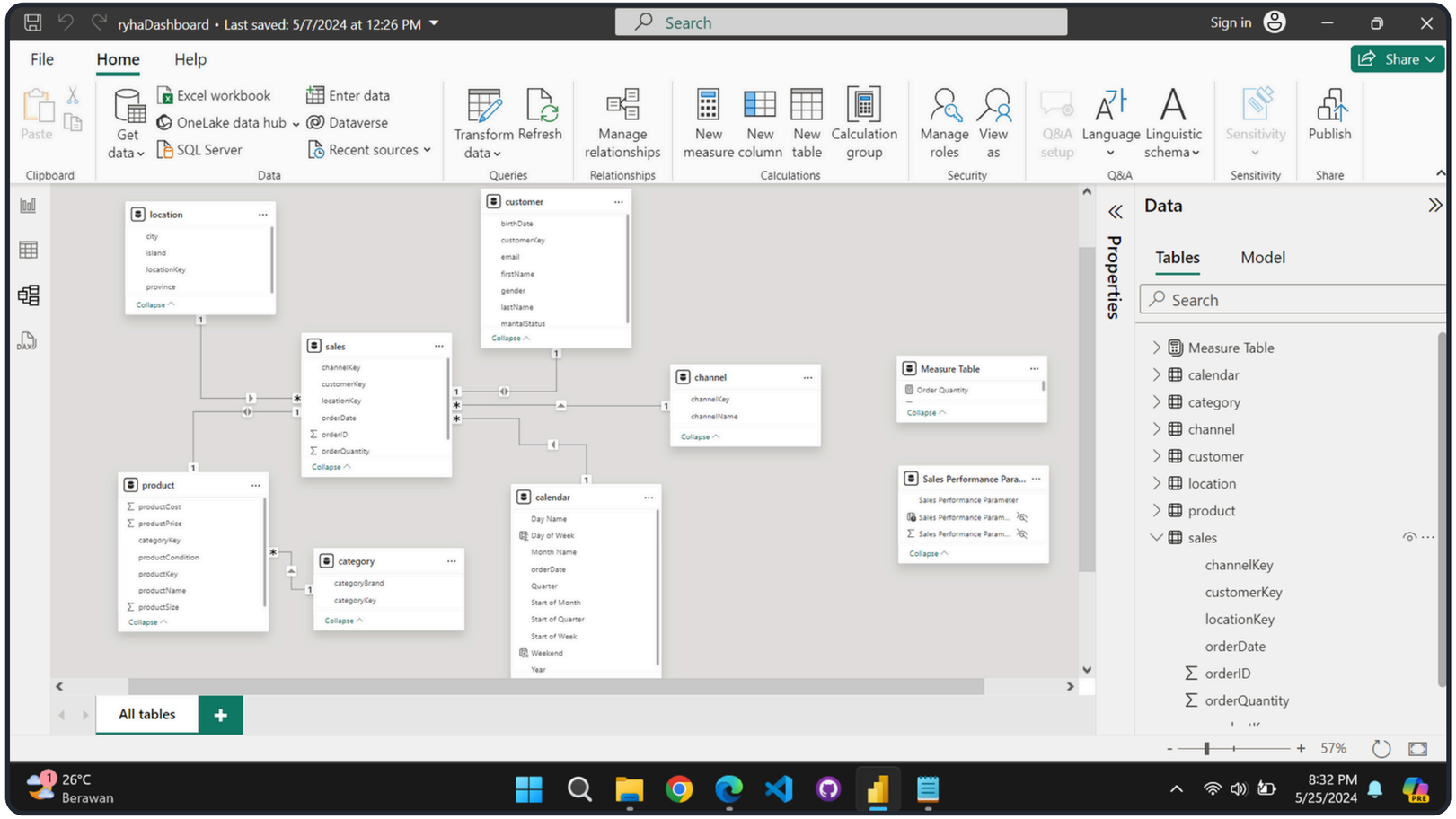



- The dataset consists of 8 tables:
  - 1 fact table:
    - sales
  - 7 dimensional tables:
    - calendar
    - category
    - channel
    - customer
    - location
    - product

- Create primary keys and foreign keys for tables in databases

# POWER BI DESKTOP

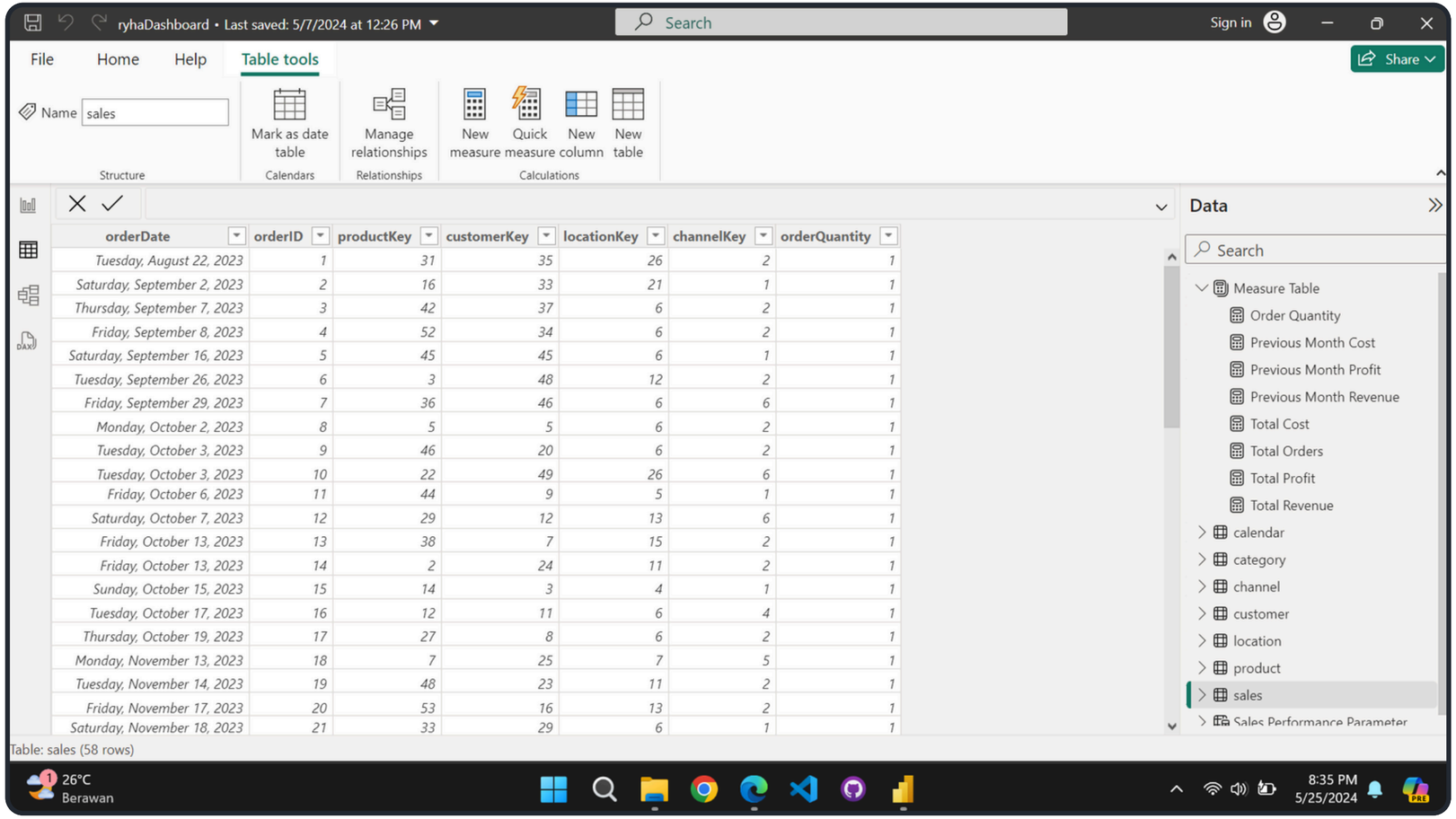
## 2. Connect MySQL database to Power BI Desktop




- The data model features a star schema, with a central fact table surrounded by associated dimension tables
- Sales table has a many-to-one relationship with the calendar, location, and channel tables
- Category table has one-to-many relationship with product table

# DAX

## 3. Explore the dataset and analyze it with DAX

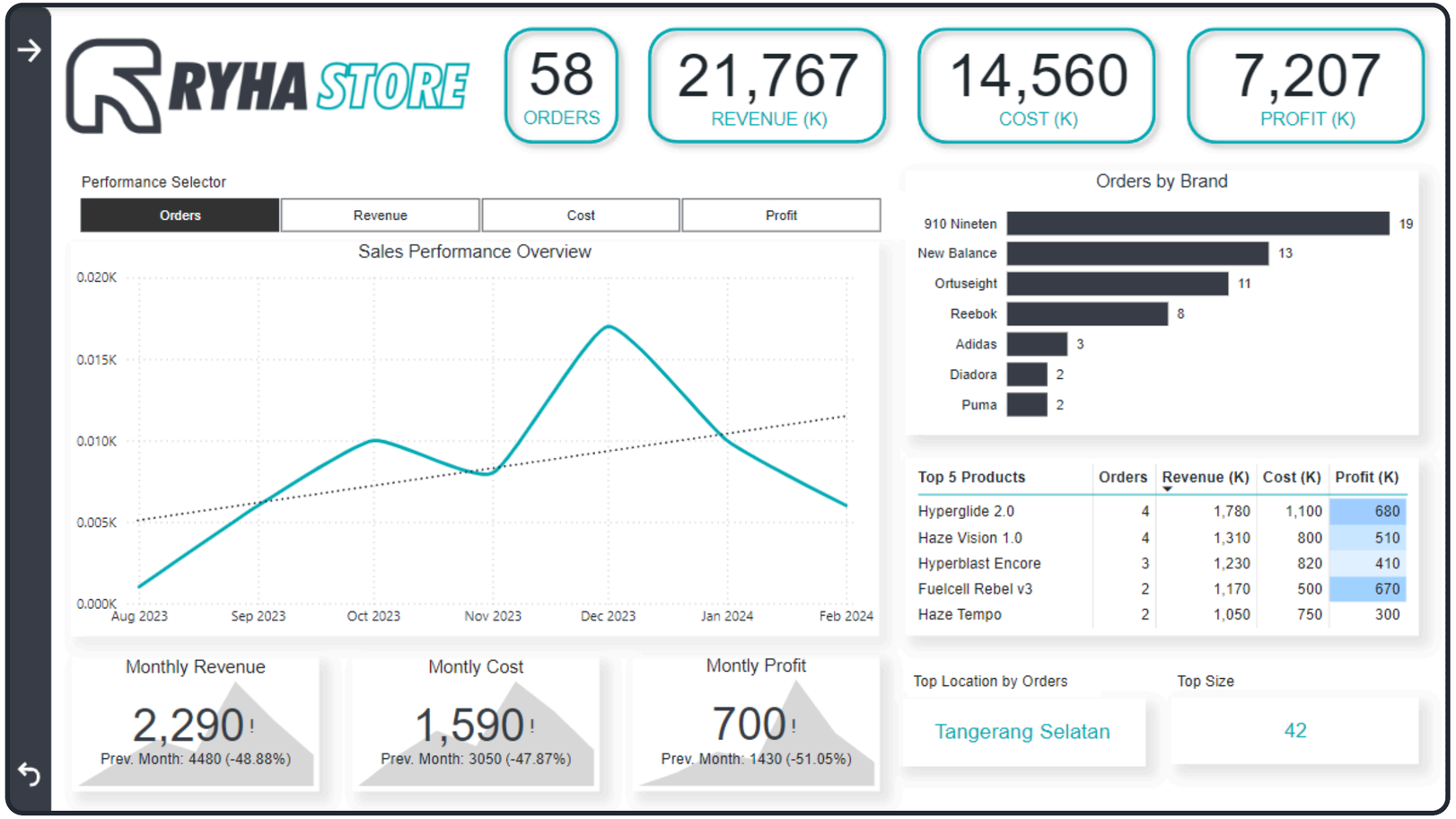



| orderDate | orderID | productKey | customerKey | locationKey | channelKey | orderQuantity |
|---|---|---|---|---|---|---|
| Tuesday, August 22, 2023 | 1 | 31 | 35 | 26 | 2 | 1 |
| Saturday, September 2, 2023 | 2 | 16 | 33 | 21 | 1 | 1 |
| Thursday, September 7, 2023 | 3 | 42 | 37 | 6 | 2 | 1 |
| Friday, September 8, 2023 | 4 | 52 | 34 | 6 | 2 | 1 |
| Saturday, September 16, 2023 | 5 | 45 | 45 | 6 | 1 | 1 |
| Tuesday, September 26, 2023 | 6 | 3 | 48 | 12 | 2 | 1 |
| Friday, September 29, 2023 | 7 | 36 | 46 | 6 | 6 | 1 |
| Monday, October 2, 2023 | 8 | 5 | 5 | 6 | 2 | 1 |
| Tuesday, October 3, 2023 | 9 | 46 | 20 | 6 | 2 | 1 |
| Tuesday, October 3, 2023 | 10 | 22 | 49 | 26 | 6 | 1 |
| Friday, October 6, 2023 | 11 | 44 | 9 | 5 | 1 | 1 |
| Saturday, October 7, 2023 | 12 | 29 | 12 | 13 | 6 | 1 |
| Friday, October 13, 2023 | 13 | 38 | 7 | 15 | 2 | 1 |
| Friday, October 13, 2023 | 14 | 2 | 24 | 11 | 2 | 1 |
| Sunday, October 15, 2023 | 15 | 14 | 3 | 4 | 1 | 1 |
| Tuesday, October 17, 2023 | 16 | 12 | 11 | 6 | 4 | 1 |
| Thursday, October 19, 2023 | 17 | 27 | 8 | 6 | 2 | 1 |
| Monday, November 13, 2023 | 18 | 7 | 25 | 7 | 5 | 1 |
| Tuesday, November 14, 2023 | 19 | 48 | 23 | 11 | 2 | 1 |
| Friday, November 17, 2023 | 20 | 53 | 16 | 13 | 2 | 1 |
| Saturday, November 18, 2023 | 21 | 33 | 29 | 6 | 1 | 1 |

- Create a DAX measures to calculate the values of key performance indicators (KPIs)
- Create a DAX measure to calculate the cost, profit, and revenue for the previous month and compare it to the last month
- Group all measurements to the measure table
- The dataset has 58 orders from Aug 2023 until Feb 2024

# DASHBOARD

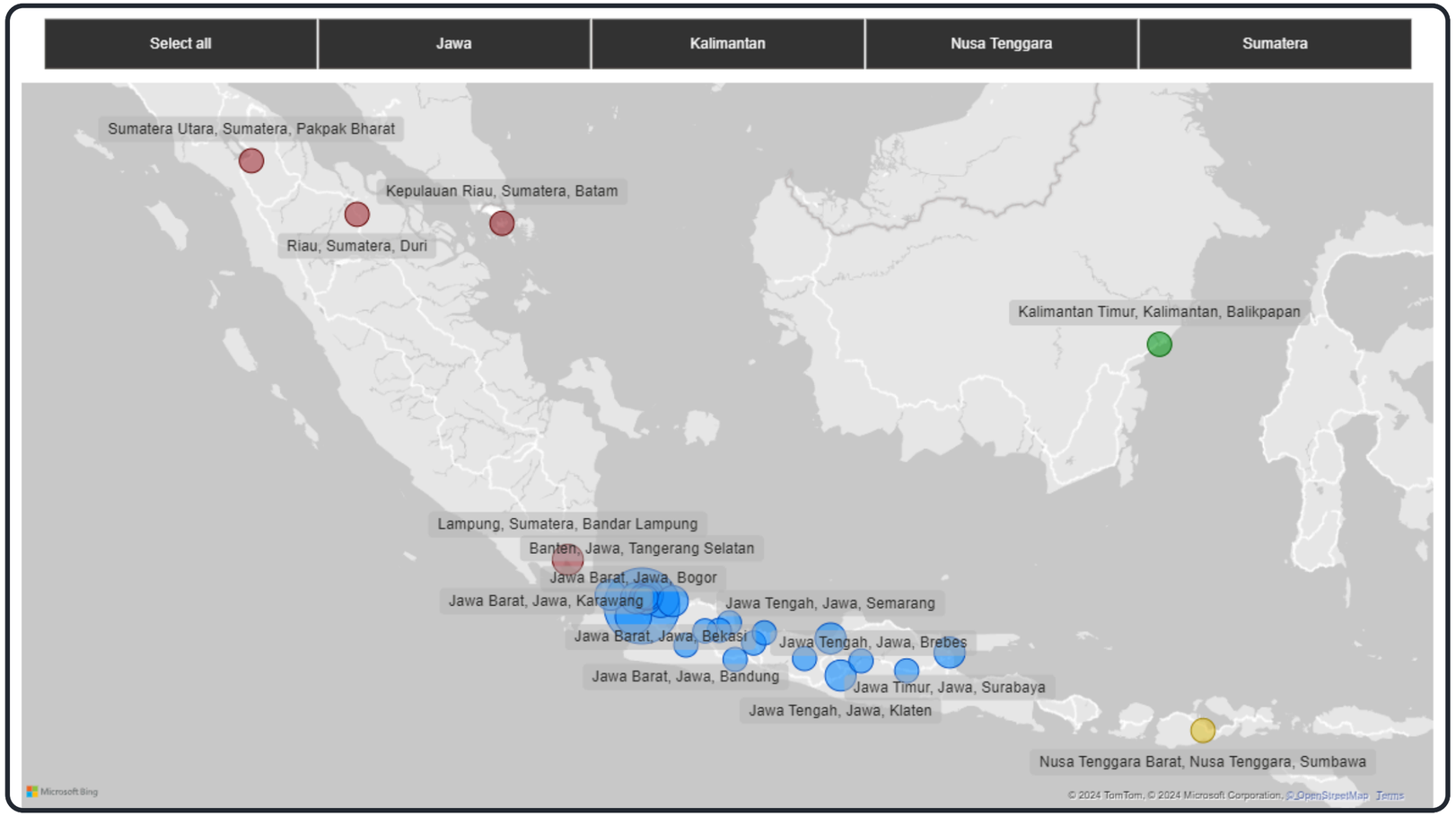
## 4. Design an interactive dashboard to visualize the data (tab 1)




- The sales performance line chart includes filters for adjusting KPI values and is grouped by monthly sales
- The bar chart displays order values by brand and is linked to a matrix table that shows the top 5 products
- The KPI cards below the line chart compare last month's values to the previous month's values

# DASHBOARD

## 4. Design an interactive dashboard to visualize the data (tab 2)




- The map chart includes a filter to group sales results by island location
- A drill-through function has been added to adjust the results by island, province, and city.

# CONCLUSION

- Sales in **December 2023** had the **highest revenue** of any month
- The KPI in **February 2024 decreased** compared to the previous month
- The top brand by orders is **910 Nineten**, followed by New Balance and Ortuseight
- The **New Balance FuelCell Rebel v3** has the highest average profit per order
- Sales are dominated by the island of Java, with the highest number of orders in **Tangerang Selatan**

# CONTACT ME | CLICKABLE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