**Sales Performance Analysis Report**

**Introduction**

* **Project Overview**:
  + This project focuses on analyzing the performance of salespersons in the organization.
* **Stakeholders**:
  + **Instructor**: Ahmed Alaa
* **Scope**:
  + Evaluation of salespersons' performance, including year-over-year comparisons, sales contribution proportions, and category-based analysis.

**Data Requirements**

* **Data Sources**:
  + AdventureWorks2019 database (SQL Server).
* **Data Volume**:
  + 17 Rows

**Data Preparation**

* **Data Cleaning**:
  + Conducted using **Power Query**, **Excel**, and **SQL Server** to ensure data accuracy and completeness.
* **Data Transformation**:
  + Extracted data from SQL Server into Excel for preprocessing.
  + Replaced null values in Power Query to maintain data consistency.
  + Added a new column to categorize salespersons by their roles (e.g., trainee, experienced).

**Analysis and Design**

* **Business Questions**:
  1. What is the difference between sales this year and last year for each salesperson?
  2. What percentage of total sales is contributed by each type of salesperson?
  3. What is the proportion of salespersons in each category?
* **KPIs and Metrics**:
  1. **Sales YTD**: Total sales for the current year.
  2. **Sales Last Year**: Total sales achieved in the previous year.
* **Visualization Plan**:
  1. One chart to illustrate the difference in sales between this year and last year for each salesperson.
  2. A chart to depict the percentage contribution of total sales by each type of salesperson.
  3. A chart showing the proportion of each type of salesperson in the team.

**Implementation**

* **Visualizations**:
  + A comprehensive dashboard showcasing:
    1. Sales differences year-over-year by salesperson.
    2. Proportion of total sales by salesperson type.
    3. Percentage representation of each salesperson category in the organization.

**Insights**

1. **Trainee Salespersons**:
   * Represent approximately **25%** of the team’s gross sales capacity.
   * Their performance, however, accounts for only **8%** of total sales this year, indicating a need for further training to align their output with the targets achieved by experienced salespersons.
2. **High-Performing Salespersons**:
   * Notable breakthroughs in sales this year were achieved by:
     + **Stephen Jian**
     + **Michael Blythe**
     + **Linda Mithal**
     + **Rachel Valdez**
     + **David Camphle**
   * Their performance highlights strong contributions to the overall success of the team.