

BUSINESS SCENARIO: ANALYZING SALES PERFORMANCE AT TARGET CORPORATION (2021-2023)

Company: Target Corporation

Scenario: Target Corporation, a major US retail chain, is aiming to gain a deeper understanding of their sales performance across various metrics over the past three years (2021-2023). This analysis will help them identify trends, optimize strategies, and improve profitability.

Data Available:

Target utilizes a robust data warehouse that integrates information from multiple sources:

- **Transactions Table:** This table captures details of every transaction, including:
 - Order ID
 - Product ID
 - Location ID (Store or Online)
 - Salesperson ID (if applicable)
 - Customer ID
 - Purchase Date
 - Quantity
- **Products Table:** This table contains data about each product sold, including:
 - Product ID
 - Product Name
 - Cost Price

- Original Sale Price
 - Discount Code
 - Discount Amount
 - Current Price
 - Taxes
- **Locations Table:** This table details each store location and online platform, providing information such as:
 - Location ID
 - Store Name (if applicable)
 - Address (including State, County, Zip Code)
 - Store Type (Physical Store, Distribution Center)
 - Demographic Data (Population, Median Income)
- **Customers Table:** This table houses customer information, including:
 - Customer ID
 - Customer Name
- **Salespersons Table:** This table focuses on in-store sales personnel, containing data such as:
 - Salesperson ID
 - Salesperson Name

QUESTIONS TO BE ANSWERED USING THE DATA:

1. **Products:** Which products generated the highest and lowest total sales over the three years?
2. **Salespeople:** Identify the salespeople who achieved the highest and lowest total sales during the period.
3. **Customers:** For each year (2021, 2022, 2023), who is the customer with the highest total purchase amount using number of product purchased and Total amount of product purchased (Target's "Customer of the Year")?
4. **Locations:** Determine the state with the highest and lowest total sales across the three years. Analyze online vs. physical store performance within each state.
5. **Profit Growth:** Calculate Target's overall profit growth from 2021 to 2023, considering product cost prices, discounts offered, and any other relevant expenses.
6. **Sales Growth:** Analyze the total sales growth of Target over the three years. Identify any trends or seasonal variations.