SUPERSTORE SALES REPORT

1. Introduction

This document explains the development of a Sales Report for the Superstore's Sales Manager. The report leverages a database designed to track sales, profit, and return data, enabling the Sales Manager to gain valuable insights into company performance.

2. Build database

A database named "Superstore DB" was created using SQL Server to manage sales data. This database includes two primary tables:

- **superstore_orders**: Stores order details like row_id , order_id, order_date, ship_date, ship_mode, customer_id, customer_name, segment, country, city, state, postal_code, region, product_id, category, sub_category, product_name, sales, quantity, discount, profit
- **superstore_return**: Tracks order returns with fields like returned, order_id.

```sql
--Create the superstore_orders table

IF OBJECT_ID('superstore_orders') IS NOT NULL DROP TABLE superstore_orders

CREATE TABLE superstore_orders
(
    row_id INT IDENTITY(1,1),
    order_id VARCHAR(50),
    order_date DATE,
    ship_date DATE,
    ship_mode VARCHAR(50),
    customer_id VARCHAR(50),
    customer_name VARCHAR(100),
    segment VARCHAR(50),
    country VARCHAR(50),
    city VARCHAR(50),
    state VARCHAR(50),
    postal_code INT,
    region VARCHAR(50),
    product_id VARCHAR(50),
    category VARCHAR(50),
    sub_category VARCHAR(50),
    product_name VARCHAR(255),
    sales DECIMAL(10, 2),
    quantity INT,
    discount DECIMAL(10, 2),
    profit DECIMAL(10, 2)
)

--SELECT * FROM superstore_orders

-- Create the superstore_returns table

IF OBJECT_ID('superstore_returns') IS NOT NULL DROP TABLE superstore_returns

CREATE TABLE superstore_returns
(
    returned NVARCHAR(3),
    order_id VARCHAR(50)
)

--SELECT * FROM  superstore_returns
```

After carefully mapping the data fields, I imported the information from a CSV file to populate the newly created tables

```
--Import the Data in 2 tables

BULK INSERT superstore_orders
FROM 'C:\Users\Asus\OneDrive\Desktop\Supestore Sales Analysis\Superstore Orders.csv'
WITH (FORMAT='CSV')

--SELECT * FROM superstore_orders

BULK INSERT superstore_returns
FROM 'C:\Users\Asus\OneDrive\Desktop\Supestore Sales Analysis\Superstore Returns.csv'
WITH (FORMAT='CSV')

--SELECT * FROM superstore_returns
```

3. **Data Access and Automation**

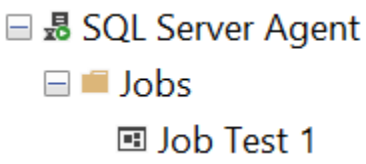
- I created a view named "superstore_excel_input" to filter the data from the 'superstore_orders' and 'superstore_return' tables before importing them. This would ensure the data imported into Power BI is in the desired format for analysis.

```
--Create the view that we need

--DROP VIEW superstore_excel_input

CREATE VIEW superstore_excel_input AS

SELECT
    o.order_id,
    YEAR(o.order_date) AS year,
    o.segment,
    o.state,
    o.region,
    o.category,
    o.sales,
    o.profit,
    r.returned
FROM superstore_orders o
LEFT JOIN superstore_returns r ON o.order_id = r.order_id

--SELECT * FROM superstore_excel_input
```

- To ensure data freshness, a stored procedure automates the process of replicating table structures and importing data from CSV files. This procedure includes error handling to address potential import issues.

```sql
--Create a Store Procedure

CREATE PROCEDURE superstore_excel_input_daily AS

IF OBJECT_ID('superstore_orders') IS NOT NULL DROP TABLE superstore_orders

CREATE TABLE superstore_orders
(
    row_id INT IDENTITY(1,1),
    order_id VARCHAR(50),
    order_date DATE,
    ship_date DATE,
    ship_mode VARCHAR(50),
    customer_id VARCHAR(50),
    customer_name VARCHAR(100),
    segment VARCHAR(50),
    country VARCHAR(50),
    city VARCHAR(50),
    state VARCHAR(50),
    postal_code INT,
    region VARCHAR(50),
    product_id VARCHAR(50),
    category VARCHAR(50),
    sub_category VARCHAR(50),
    product_name VARCHAR(255),
    sales DECIMAL(10, 2),
    quantity INT,
    discount DECIMAL(10, 2),
    profit DECIMAL(10, 2)
)

IF OBJECT_ID('superstore_returns') IS NOT NULL DROP TABLE superstore_returns

CREATE TABLE superstore_returns
(
    returned NVARCHAR(3),
    order_id VARCHAR(50)
)

BULK INSERT superstore_orders
FROM 'C:\Users\Asus\OneDrive\Desktop\Supestore Sales Analysis\Superstore Orders.csv'
WITH (FORMAT='CSV')

BULK INSERT superstore_returns
FROM 'C:\Users\Asus\OneDrive\Desktop\Supestore Sales Analysis\Superstore Returns.csv'
WITH (FORMAT='CSV')

--EXEC superstore_excel_input_daily
```

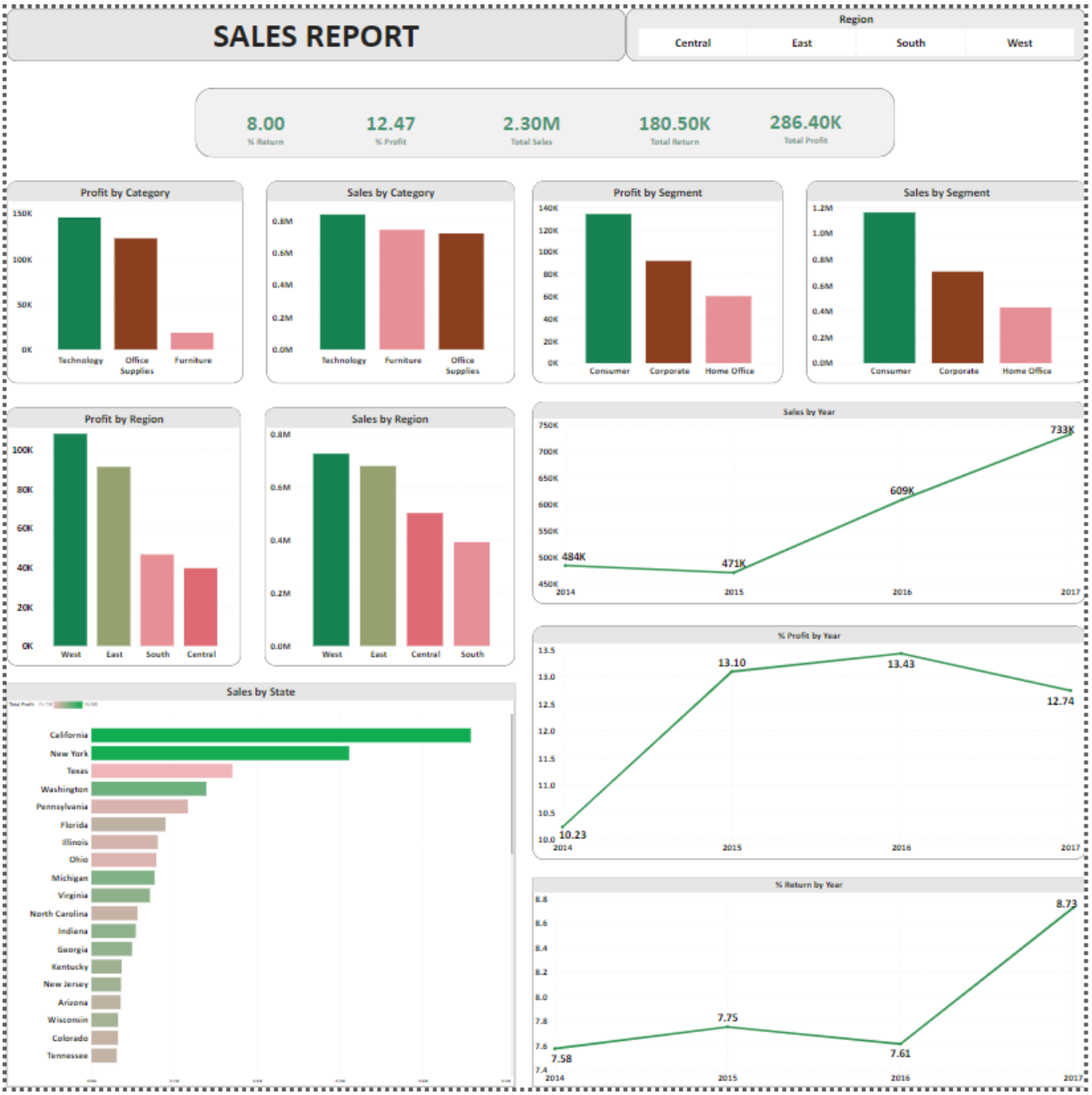
- A daily job is scheduled to automatically run the stored procedure at 7:00 AM, guaranteeing reports are updated whenever the CSV file is refreshed.



4. **Sales Report**

The Sales Report provides the Sales Manager with a comprehensive view of company performance through:

- Key Sales Metrics: Track overall sales trends, identify sales strengths by region/product/customer, analyze profitability, and monitor return rates.
- Data Visualization: Charts and graphs visually represent key metrics, making it easier to identify trends and patterns.
- Actionable Insights: The data-driven approach empowers the Sales Manager to develop targeted marketing campaigns, focus resources on high-performing products, and implement strategies to improve product quality or customer satisfaction (potentially leading to reduced returns).



Sales Report

Link Report: [Sales Report]