ModaCore Sales Performance Optimization: Leveraging Power BI to Drive Retail Efficiency and Strategic Growth

### **About the Project**

This case study explores the development of an interactive Power BI dashboard for **ModaCore**, a fashion-focused retail brand operating multiple store outlets. The dashboard enables business stakeholders to monitor real-time sales performance, understand store and product trends, and make data-driven decisions to enhance operational efficiency.

#### **Business Problem**

ModaCore's management faced growing challenges in assessing weekly sales performance across its store locations and product lines. Key issues included:

- X Lack of real-time insights: Sales reports were manually generated and often delayed.
- X Undefined KPIs: Teams lacked clarity on the key performance indicators to monitor.
- X Inconsistent reporting: Sales data was scattered, limiting trend analysis and comparisons.
- **X** Low visibility into store and product trends: Management couldn't quickly identify top-performing stores, personnel, or best-selling products.

Without a centralized, visual system, leadership was often reacting late to sales dips, missing growth opportunities, and struggling with inconsistent reports.

# **Project Objectives**

The goal was to design a **dynamic and automated Power BI dashboard** that enables ModaCore to:

Monitor weekly and daily sales performance

- Track key KPIs such as total orders, customers, revenue, AOV (Average Order Value), and week-over-week growth
- Compare store performance, product performance, and sales personnel metrics
- Identify high-performing channels and bottlenecks in order volume or revenue
- Ensure reports refresh weekly without manual intervention

#### **Approach & Workflow**

#### 1. Data Integration

Connected and cleaned five main tables from ModaCore's system:

- Orders
- Store
- Product
- Customer
- Sales Personnel

### 2. Data Transformation & Modeling

- Transformed date fields, created a date table for time intelligence
- Defined relationships between tables (e.g., linking orders to products and stores)
- Handled data types and built calculated columns for enhanced reporting

## 3. KPI Development & DAX Measures

Created robust DAX measures including:

- Sales WoW%
- Average Order Value
- Top 5 stores/products/personnel
- Weekly comparison metrics
- Dynamic color-coded performance indicators

## 4. Dashboard Design & Visualization

Designed four clean dashboard pages:

- Home Page: Overview of KPIs and trends
- Store Dashboard: Store-wise comparisons
- **Product Dashboard:** Sales by product category and performance
- Sales Team Performance: Staff productivity and efficiency

All visuals are dynamic, filterable, and optimized for business storytelling.

## 5. Automation & Deployment

- Scheduled weekly data refresh using Power BI Service + On-Premise Gateway
- Published interactive dashboard and shared access with stakeholders

### **Tools & Technologies**

- Power BI Data modeling, DAX, dashboard development
- Power Query Data transformation and cleanup
- Excel / CSV Data source files
- SQL (basic queries) For raw data exploration
- Power BI Service Deployment, scheduling, and dashboard sharing