**Retail Analytics**  
**Project Report**

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### ****Objective****

The objective of this Power BI report is to create a visually compelling and user-friendly dashboard that effectively communicates key performance metrics for Retail Analytic. This report aims to provide insights into customer behavior, sales trends, inventory management, and employee performance to support strategic decision-making. It will cover areas such as revenue analysis, customer segmentation, stock performance, and workforce efficiency by consolidating data from multiple sources. The expected impact is to enhance data-driven decision-making, enabling Retail Analytic to optimize operations, improve profitability, and remain competitive in the retail industry.

### ****Significance****

**Data Consolidation:** Merges multiple data sources for a holistic view of business performance.

**Informed Decision-Making:** Provides actionable insights into sales, customer behavior, and inventory.

**Proactive Problem-Solving:** Detects issues early and enables timely interventions.

**Operational Efficiency:** Optimizes sales and stock management for better resource utilization.

**Competitive Advantage:** Helps predict trends, tailor marketing strategies, and improve customer engagement.

**Enhanced Stakeholder Communication:** Uses interactive visualizations to simplify complex data.

**Future Growth Enable:** Establishes a foundation for predictive analytic and long-term planning.

**Performance Optimization:** Tracks KPIs to ensure continuous business improvement.

#### ****Dataset Description****

The Retail Analytic database contains sales and operational data for a retail company dealing with various product categories across multiple regions.

#### ****Table Explanations****

**Customers Table:** Stores customer details, including ID, name, contact details, location, and purchase history.

**Employees Table:** Maintains employee records, including ID, name, role, hire date, and performance metrics.

**Orders Table:** Captures order information, including order ID, customer ID, employee ID, order date, shipping details, and total amount.

**Order Details Table:** Provides detailed product information for each order, including product ID, unit price, quantity, and discount.

**Products Table:** Contains product data such as product ID, name, category, supplier, stock levels, and pricing.

**Suppliers Table:** Stores supplier information, including company name, contact details, and product supply details.

### ANALYSIS OF REPORT

#### ****1. Sales Analysis****

**Revenue Trends:** Monthly, quarterly, and yearly sales analysis highlights revenue growth or decline.

**Top-Selling Regions:** Identifies locations with the highest sales contribution.

**Seasonal Patterns:** Determines sales spikes during specific seasons or promotional periods.

#### ****2. Customer Analysis****

**Customer Segmentation:** Groups customers into high-value, frequent, and new buyers.

**Retention Rates:** Analyzes repeat customers versus new acquisitions.

**Regional Insights:** Examines customer distribution across different locations.

#### ****3. Employee Analysis****

**Sales by Employee:** Identifies top-performing employees based on sales revenue.

**Order Fulfillment Efficiency:** Measures how efficiently employees handle and process orders.

**Performance Metrics:** Tracks key employee KPIs such as orders processed, revenue contribution, and customer feedback.

#### ****4. Product Analysis****

**Best-Selling Products:** Highlights top revenue-generating products.

**Nonperforming Products:** Identifies low-demand products with excess inventory.

**Category Insights:** Analyzes product categories to determine profitability and inventory trends.

### **CONCLUSION**

The analysis of Retail Analytic data has revealed valuable insights into sales, customer preferences, and operational efficiency. The [**Electronics and Fashion]** categories dominate sales, contributing a combined total of[ **$2.3M]** in revenue. [**New York** ]emerges as the top-performing region, accounting for[ **$450K** ]in total sales. Among products, [**Smartphones** ]are the best-sellers, while [**XYZ Suppliers]** lead as the top supplier. In terms of employee performance,[ **John Doe]** is the top salesperson, driving the highest revenue in the[ **USA market]**. Overall, the business has experienced steady growth, with quarterly sales increasing from [**$120K in Q1 2022 to $500K in Q4 2023]**. These insights serve as a strong foundation for future strategies, ensuring continuous growth and market leadership.

