Shopify Analysis

BUSINESS REQUIREMENT

The goal of this project is to analyze Shopify sales data in Power BI to uncover meaningful insights into transaction performance, customer purchasing behavior, and long-term customer value. By designing an interactive dashboard, the objective is to help stakeholders identify patterns in revenue generation, customer retention, and engagement trends to support data-driven decision-making.

KPI's Requirements

1. Transactions Performance

This section focuses on evaluating the overall health and effectiveness of sales operations by tracking:

- **Net Sales**: Total revenue generated before tax.

- **Total Quantity**: The cumulative number of products sold.

- **Net Avg Order Value**: The average revenue per transaction, excluding tax.

Power BI

Shopify Analysis

STEPS IN PROJECT

- **Requirement Gathering/ Business Requirements**

- **Data Walkthrough**

- **Data Connection**

- **Data Cleaning / Quality Check**

- **Data Processing**

- **DAX Calculations**

- **Dashboard Lay outing**

- **Charts Development and Formatting**

- **Dashboard / Report Development**

- **Insights Generation**

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KPI's Requirements

2. Customer Purchase Behavior

Understanding how customers interact with the business is critical. This section highlights:

- **Total Customers**: The count of unique buyers.

- **Single Order Customers**: Customers who placed only one order.

- **Repeat Customers**: Customers with more than one order, indicating loyalty.

3. Retention & Value KPIs

To evaluate long-term growth and customer value, this section includes:

- **Lifetime Value (LTV)**: The total revenue generated by a customer over time.

- **Repeat Rate**: The percentage of customers who return to make another purchase.

- **Purchase Frequency**: How often customers place orders, on average.

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Charts Requirements

*This section will support dynamic analysis using a **measure selector** for: **Net Sales, Total Quantity, Total Customers, Repeat Customers***

1. Regional Overview - Province and Cities

- **Filled Map (Province-Level)**

  - **Purpose**: Display province-wise performance using **color saturation** based on the selected measure.

  - **Interactivity**: Changes dynamically with the measure selector.

- **Bubble Map / Density Map (City Level)**

  - **Purpose**: Visually represent **sales or customer density** at a more granular level.

  - **Bubble Size or Heat Intensity**: Driven by the selected measure.

  - **Tooltip**: Shows all key metrics (Net Sales, Quantity, Total Customers, Repeat Customers).

- **Bar Chart (City-Level Performance)**

  - **Purpose**: Compare **top-performing cities** based on the selected KPI.

  - **Sorted**: Descending order by selected measure.

  - **Dynamic**: Interacts with slicers/filters and responds to the KPI selector.

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Charts Requirements

*This section will support dynamic analysis using a **measure selector** for: **Net Sales**, **Total Quantity**, **Total Customers**, **Repeat Customers***

2. Sales Trend Over Time

- **Area Chart – Trend by Day**

  - **Purpose**: Show the **daily trend** of the selected measure (e.g., daily Net Sales or daily Repeat Customers).

  - **Interactivity**: Changes dynamically based on the selected measure.

- **Bar Chart or Line Chart – Trend by Hour**

  - **Purpose**: Display **sales or customer activity by hour of the day** (e.g., 0–23 hrs), revealing peak activity periods.

  - **Use Case:** Helps understand time-of-day behavior, useful for marketing or operational timing decisions.

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BUSINESS REQUIREMENT

Charts Requirements

*This section will support dynamic analysis using a **measure selector** for: **Net Sales**, **Total Quantity**, **Total Customers**, **Repeat Customers***

3. Gateway Payment Method

- Identify the **most and least used payment methods**.
- Detect **customer preferences** across regions or campaigns.

4. Product Type

- Determine which **product types generate the highest revenue and order volume**.
- Understand how **customer engagement varies** across different product categories.

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Charts Requirements

*This section will support dynamic analysis using a **measure selector** for: **Net Sales**, **Total Quantity**, **Total Customers**, **Repeat Customers***

- Provide a **dedicated page** to display transaction-level or detailed data.

- Allow users to **drill through** from summary visuals (like charts and KPIs) to see underlying records.

- Enable users to explore data at a **granular level**, such as individual orders, customers, or product types.

- Help explain **summary trends** and **validate aggregated metrics** with raw data.

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