Shopify Analysis

**PROJECT PHASES**

1. Requirements Gathering – Define business goals and KPIs.
2. Data Walkthrough – Understand structure, content, and relationships.
3. Data Connection – Connect Power BI to source files or APIs.
4. Data Cleaning – Address missing, inconsistent, or incorrect values.
5. Data Modeling – Define relationships and structure the data model.
6. Data Processing – Transform data into a usable analytical format.
7. DAX Calculations – Create calculated measures and KPIs.
8. Dashboard Layout – Design interactive and intuitive dashboard pages.
9. Visual Development – Build and format visual elements (charts, maps, tables).
10. Report Creation – Assemble dashboards with filters, slicers, and interactions.
11. Insight Extraction – Analyze visual trends and generate business insights.

**PROJECT GOAL**

The purpose of this analysis is to explore Shopify sales data using Power BI. The objective is to uncover actionable insights related to customer behavior, transaction trends, and long-term value. By creating an interactive dashboard, stakeholders can make data-driven decisions regarding performance, retention, and engagement.

**KEY PERFORMANCE INDICATORS (KPIs)**

1. Transaction Metrics:

* Net Sales: Revenue generated excluding tax.
* Total Quantity: Number of items sold.
* Average Order Value: Average revenue per transaction (before tax).

2. Customer Behavior:

* Total Customers: Count of unique buyers.
* Single-Order Customers: Buyers with only one transaction.
* Repeat Customers: Buyers with more than one order.

3. Customer Retention and Value:

* Lifetime Value (LTV): Total revenue per customer over time.
* Repeat Rate: Proportion of customers who make a second purchase.
* Purchase Frequency: Average number of purchases per customer.

**CHART REQUIREMENTS**

The report should include a dynamic KPI selector to view metrics such as Net Sales, Total Quantity, Total Customers, and Repeat Customers.

**DASHBOARD ELEMENTS**

1. Regional Overview:

* Filled Map (Province): Color-coded based on the selected KPI.
* Bubble Map (City): Bubble size reflects customer or sales density.
* Bar Chart (City): Top cities ranked by selected KPI.

2. Sales Trends Over Time:

* Area Chart (by Day): Shows day-by-day trends for the selected metric.
* Bar/Line Chart (by Hour): Displays performance by hour (0–23 hrs).

3. Payment Gateway Analysis:

* Highlight the most and least used payment methods by customers.
* Understand geographic or campaign-specific preferences.

4. Product Category Analysis:

* Identify which product types generate the highest sales.
* Explore differences in customer behavior across categories.

5. Transaction Drill-Through Page:

* Allows users to navigate from summarized visuals to detailed transaction data.
* Enables deeper analysis at the order, customer, or product level.
* Supports validation of trends and figures using raw data.