Shopify Sales & Customer Analysis - A Power BI Project Report

1. Project Overview

This project aims to uncover valuable business insights from one week of Shopify sales data using Power BI. The analysis evaluates transaction performance, customer behavior, product trends, and payment preferences to support data-driven decision-making.

The dashboard is designed to be interactive and dynamic, offering both high-level KPIs and drill-down capabilities for deeper exploration.

2. Business Objectives

- Evaluate overall sales performance and transaction efficiency

- Understand customer behavior (repeat vs. single-order buyers)

- Track product-wise and regional sales performance

- Identify high-performing payment gateways

- Enable granular-level analysis for future marketing, stocking, and engagement strategies

3. Key KPIs Tracked

Net Sales: Total revenue generated before tax

Total Quantity: Total number of products sold

Average Order Value: Net Sales divided by number of orders

Total Customers: Unique customer count

Repeat Customers: Customers with more than one order

Lifetime Value (LTV): Total spend per customer

Repeat Rate: % of customers who made multiple purchases

Purchase Frequency: Average number of orders per customer

4. Dashboard Insights

A. Transaction Performance

- Net Sales: $41,80,874

- Average Order Value: $562.6

- Total Quantity Sold: 7534

Insight: Strong revenue and order value suggest high-ticket products or effective cross-selling.

B. Customer Behavior

- Total Customers: 4431

- Repeat Customers: 2039 (approximately 46%)

- LTV: $943.6

- Purchase Frequency: 1.68

Insight: Nearly half of the customers are returning, suggesting potential for loyalty programs.

C. Sales Trends Over Time

Insight: Time-of-day and daily patterns can inform marketing campaign timings.

D. Regional Sales Distribution

Top Performing Cities: New York, Houston, Dallas, Washington

Insight: Regional targeting can increase ROI.

E. Product Type Performance

Top-Selling Categories: Running Shoes, Walking Shoes, Cycling Shoes

Insight: Athletic footwear is dominant.

F. Payment Gateway Preferences

Top Methods: Shopify Payments - 58.45%, PayPal - 22.29%, Gift Card - 17.62%

Insight: Customers prefer Shopify Payments.

5. Technical Process Summary

- Requirement Gathering

- Data Cleaning

- Data Modeling

- DAX Measures

- Dashboard Development

- Insights Generation

6. Tools Used

Power BI: Dashboard creation & DAX modeling

Excel/CSV: Raw data cleaning and verification

DAX: Calculated metrics and dynamic visuals

7. Limitations & Future Scope

- One-week data limits long-term trend forecasting.

- Suggestions: Use monthly data, add campaign/inventory insights

8. Conclusion

This Shopify sales analysis provides critical insights into short-term sales behavior, customer loyalty, and product performance. The dashboard helps management make informed decisions in sales, marketing, and inventory control.