**ShopEase E-Commerce Sales and Customer Analysis Report**

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Tools Used: SQL & Power BI

Introduction

This project aims to analyze sales, customer behavior and product performance for ShopEase E-Commerce store using SQL & Power BI. The analysis identifies key patterns, highlights high and low-performing areas and provides actionable insights to improve overall business performance.

Objective

* To understand monthly and seasonal revenue.
* To identify top-performing products and categories.
* To analyze customer demographics and payment preferences.
* To evaluate delivery performance and suggest improvements.

Data Description

* The dataset contains details about customer orders, including Order ID, Product, Category, Gender, Price, Quantity, Discount, Payment Method, Shipping Cost and Order Status.
* Data Cleaning and transformation were performed in SQL ensuring consistent data types, handled missing and null values.
* Analyzed and perform key metrics in SQL and Power BI (power query) .
* Use Power BI For Data Visualization.

Tools & Techniques

* SQL – for data extraction and data validation
* Power BI - for dashboards and visualization
* Power Query – for metrics

Key Metrics

* Net Revenue by Month
* Sales by Category
* Best & Worst selling products
* Customer Gender Split
* Payment Method Distribution
* Delivery Performance

Analysis & Insights

* Total Revenue : ShopEase generated 19.6M with Net Revenye of 23.2M indicating strong overall performance.
* Average Order Value : The average order value is 594.6 .
* Monthly Trend : Net Revenue shows seasonal trends for month May, July and November.
* Product Performance : Items like T-shirts and Titak Watches showing higher sales while LCD AND Keyboard showing lower sales.
* Customer Behavior :

Gender- Males contribute a slightly higher share of purchases.

Login Type- The registered members made more than 20M sales.

Payment Method- Credit card dominate, indicating trust in digital payments.

* Operational Metrics :

Average Delivery Days- 5 days

Delay VS Within- The delivery analysis shows that 52.86% of orders were delivered within the expected time, while 47.14% experienced delays. This indicates that although more than half of the deliveries meet the target timeline, nearly half still face delays.

* Promotion Cost : 60.8K spent to driving the sales uplift.

Recommendations

* Improve Delivery Performance:

Partner with reliable couriers and use real-time tracking or warehouse automation to reduce delays and speed up deliveries.

* Boost Low Sales Months:

Run limited-time offers and increase digital marketing during slow months.

Prepare stock early for seasonal peaks in May and November.

* Focus on Top Categories:

Continue promoting Fashion and Home & Furniture to maintain strong revenue growth.

* Revive Low-Performing Products:

Reviewing pricing, stock and marketing strategies for weaker products like Keyboard.

* Encourage Digital Payments:

Offer small cashbacks or rewards for e-wallet and debit card users to diversify payment use.

* Increase Customer Growth:

Launch referral or first-purchase offers to attract new users and grow the customer base.