**Sales Analysis Report**

**Introduction:**

This Report analyzes the sales data of an E-learning platform, to understand customer purchasing behaviour, payment methods, coupon usage, and revenue trends. The dataset covers transactions of 2 months with details such as product, payment method, discount coupons, languages, and transaction amount.

**Data Cleaning and Transformation – Excel & Power BI**

**1. Dataset Cleaning in Excel**

* Removed duplicate records to ensure unique entries.
* Handled missing values by filling with appropriate defaults (e.g., “Unknown” for text, 0 for numbers).
* Standardized formats for dates, text, and numeric columns.

**2. Data Transformation in Power BI using DAX**

* Imported cleaned dataset into Power BI.
* **Created separate sales status columns:**
  + - **Paid**, **Initialized**, and **Refund** columns to easily filter and analyze payment types.
    - Example DAX:
    - Paid = Sum of paid cutomers
    - Initiated = Sum of Initiated orders
    - Refund = Sum of Refund orders
* **Calculated total revenue column:**
  + - Summed all amounts for overall revenue analysis.
    - Example DAX:
    - Total Revenue = Sum of Amount in INR with GST of payment that are completed and not refunded
* Enabled better filtering, segmentation, and better calculation for dashboards.

**3. Benefits**

* Clean, consistent, and structured dataset ready for analysis.
* Calculated columns allowed for detailed insights into sales trends, payment status, and customer conversion.
* Prepared dataset for creating interactive dashboards, charts, and slicers in Power BI.

**Outcome:**

**Overall Performance:**

* Total Users Registered: 5,885
* Total Orders: 1,730
* Total Revenue: ₹2,258,775
* Average Order Value (AOV): ₹1,305.65

**Sales by Coupon Code:**

* Highest used coupon: Coupon1 (87 orders)
* Next best: Coupon9 (17 orders)
* Other coupons had very low usage (1–4 orders each).

**Revenue by Language:**

* English: Highest - ₹1053365
* Tamil: Second - ₹501542
* Multilingual: Moderate contribution
* Hindi & Malayalam: Very Low

**Revenue by Product Code:**

* Product1 generated the highest revenue - ₹558513.
* Product4 second highest contributor.
* Other products contributed significantly less.

**Revenue by Source:**

* Direct sales: ₹2004085.
* Email campaigns: ₹127522.
* Paid ads: ₹86823.
* Influencers: ₹40345.

**Insights & Recommendations:**

* Coupon Strategy: Expand on Coupon1 success, test similar offers.
* Language Preference: Focus marketing on English and Tamil audiences.
* Product Strategy: Invest more in Product1 & Product4 promotion.
* Marketing Channels:
* Direct sales strong, but email & influencer campaigns underperforming.
* Revisit targeting & messaging strategies.

**Conclusion:**

In this project, the dataset was first cleaned and structured in Excel by removing duplicates, handling missing values, and merging two sheets using VLOOKUP() to prepare the data for deeper analysis easily.

In Power BI, advanced transformations were applied using DAX, including creating separate sales status columns (Paid, Initiated, Refund) and calculating total revenue. These transformations enabled effective segmentation and interactive visualizations.

The outcome was a clean, well-structured, and enriched dataset, which allowed for comprehensive analysis of sales trends, revenue distribution, and customer behavior. The process demonstrates a strong foundation in data cleaning, transformation, and visualization, highlighting the ability to generate actionable insights from raw data.