# **Sales Data Analysis Report**

## **Overview**

This report explores key insights from the sales dataset, covering aggregate metrics and drill-downs based on various dimensions.

## **Key Insights**

### **Aggregate Sales Data**

|  |  |
| --- | --- |
| **Metric** | **Value** |
| Total Sales | Rs 10.20 Billion |
| Average Transaction Value | Rs 20,405 |
| Total Quantity Sold | 3,747,755 |
| Most Sold Product | Notebook |
| Most Profitable City | Kolkata |

**Conclusion**: The overall sales performance is strong, with notebooks being the most popular product and **Kolkata leading in revenue generation**.

### **Sales Breakdown by Payment Method**

|  |  |
| --- | --- |
| **Payment Method** | **Revenue** |
| Cash | Rs 2558.68 Cr |
| Debit Card | Rs 2552.37 Cr |
| UPI | Rs 2530.18 Cr |
| Credit Card | Rs 2517.71 Cr |
| Unknown | Rs 45.73 Cr |

**Conclusion**: **Cash transactions contribute the highest revenue**, closely followed by debit card and UPI payments.

### **Sales Breakdown by Store Type**

|  |  |
| --- | --- |
| **Store Type** | **Revenue** |
| In-Store Sales | Rs 5078.88 Cr |
| Online Sales | Rs 5078.08 Cr |
| Unknown | Rs 45.73 Cr |

**Conclusion**: Sales are nearly **equal between in-store and online channels**, indicating a balanced customer preference.

### **Sales Breakdown by Region**

|  |  |
| --- | --- |
| **Region** | **Revenue** |
| South | Rs 3177.27 Cr |
| East | Rs 2654.97 Cr |
| North | Rs 2171.50 Cr |
| West | Rs 2159.91 Cr |
| Unknown | Rs 39.01 Cr |

**Conclusion**: The **South** region contributes the **highest revenue**, while the West and North regions generate comparable sales.

### **Sales Breakdown by Gender**

|  |  |
| --- | --- |
| **Gender** | **Revenue** |
| Male | Rs 3397.98 Cr |
| Other | Rs 3391.55 Cr |
| Female | Rs 3367.39 Cr |
| Unknown | Rs 45.73 Cr |

**Conclusion**: Revenue is nearly **evenly distributed across genders**, with male customers having a slight lead.

**SQL Queries**

* 1. **Total Sales**

SELECT SUM(TransactionAmount) AS TotalSales FROM SalesData;

* 1. **Average Transaction Value**

SELECT AVG(TransactionAmount) AS AvgTransactionValue FROM SalesData;

* 1. **Total Products Sold**

SELECT SUM(Quantity) AS ProductSold FROM SalesData

* 1. **Most Products Sold**

SELECT ProductName, COUNT(\*) AS SalesCount

FROM SalesData

GROUP BY ProductName

ORDER BY SalesCount DESC

LIMIT 1;

* 1. **Most Profitable City**

SELECT City, SUM(TransactionAmount) AS Revenue

FROM SalesData

GROUP BY City

Order BY Revenue DESC

LIMIT 1;

* 1. **Sales By Payment Method**

SELECT PaymentMethod, SUM(TransactionAmount) AS Revenue FROM SalesData

GROUP BY PaymentMethod

Order BY Revenue DESC;

* 1. **Sales By Store Type**

SELECT StoreType, SUM(TransactionAmount) AS Revenue

FROM SalesData

GROUP BY StoreType

Order BY Revenue DESC;

* 1. **Sales By Region**

SELECT Region, SUM(TransactionAmount) AS Revenue

FROM SalesData

GROUP BY Region

Order BY Revenue DESC;

* 1. **Sales By Gender**

SELECT CustomerGender, SUM(TransactionAmount) AS Revenue FROM SalesData

GROUP BY CustomerGender

Order BY Revenue DESC;

* 1. **Sales By Gender in a region**

SELECT Region, CustomerGender, SUM(TransactionAmount) AS TotalRevenue

FROM SalesData

GROUP BY Region, CustomerGender

ORDER BY TotalRevenue DESC;

* 1. **Loyalty Points gained by each Customer ID**

SELECT CustomerID, SUM(LoyaltyPoints) as LoyaltyPoints

FROM SalesData

GROUP BY CustomerID