

Retail Sales Analysis Using Power BI

Project Summary Document

Project Overview

Objective:

To analyze online retail sales data using Power BI and derive business insights related to revenue, customer behavior, and product performance.

Dataset:

Columns:

InvoiceNo,
StockCode,
Description,
Quantity,
InvoiceDate,
UnitPrice,
CustomerID,
Country

Data Source:

Cleaned using SQL queries,
imported into Power BI via Excel workbook.

Tools Used:

SQL Server

Power BI Desktop

Power BI Service (training exposure via institute-provided account).

Report Structure

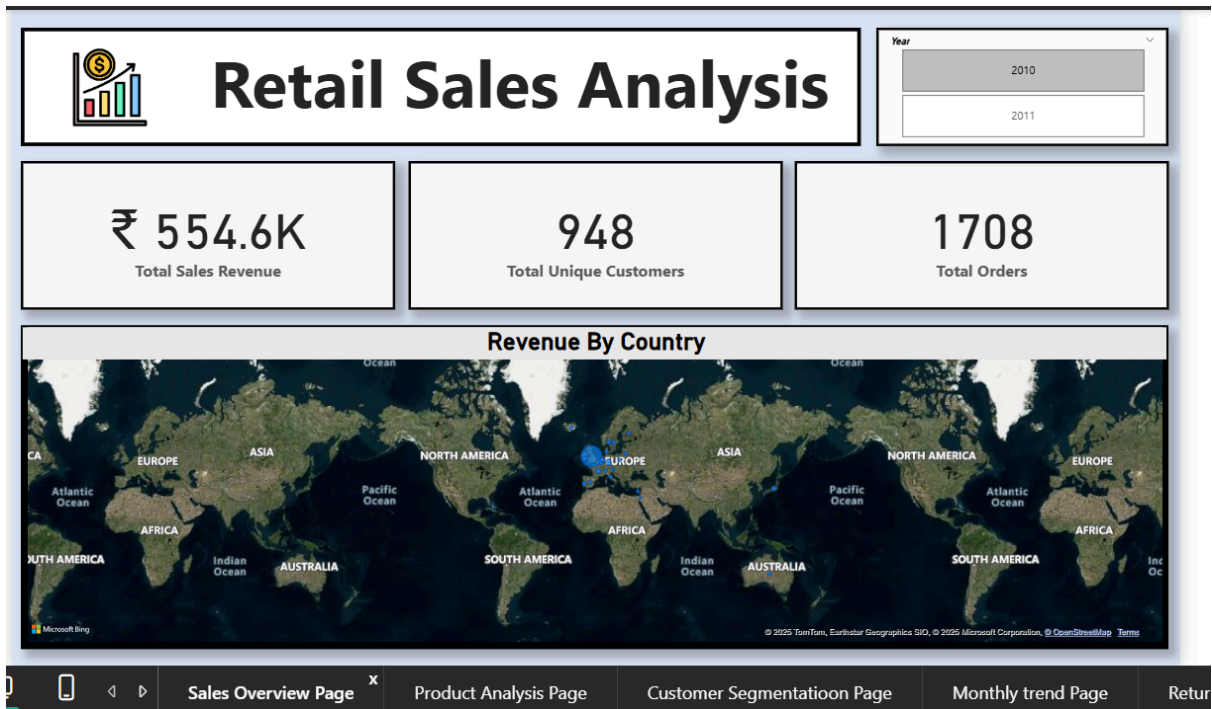
1. Sales Overview Page

KPIs: Total Sales Revenue, Total Unique Customers, Total Orders

Visuals:

Map: Revenue by Country

Bar Chart: Revenue by Country

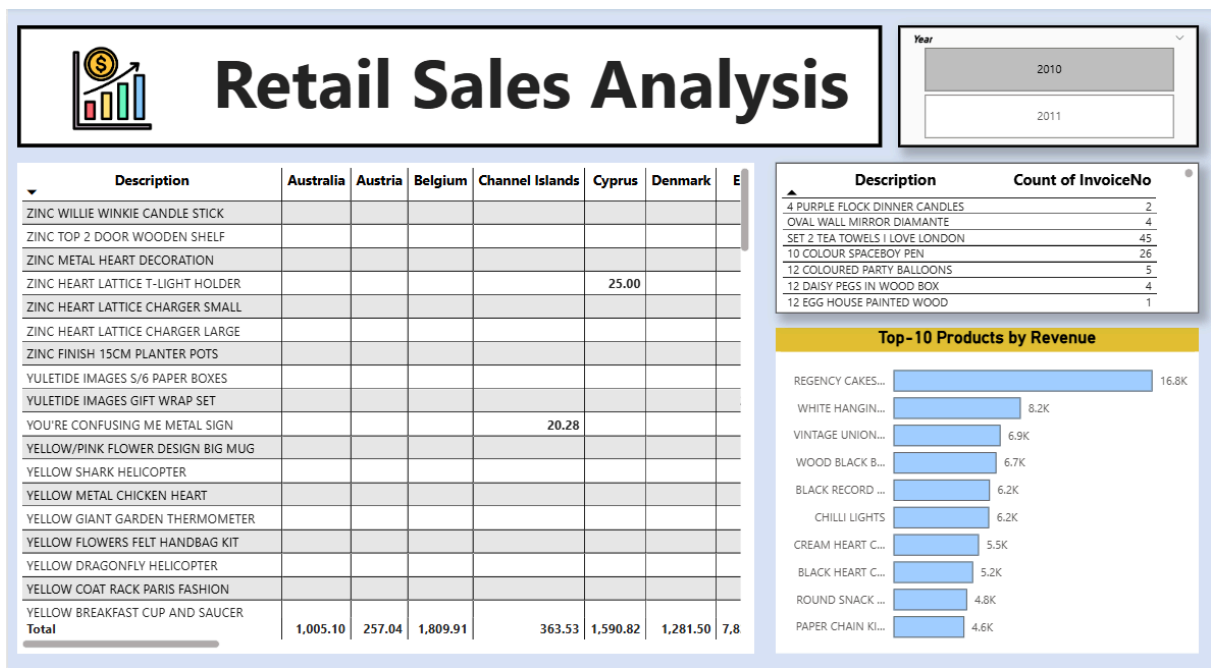


2. Product Analysis Page

Top Products by Revenue

Matrix: Product Revenue by Country

Table: Products Sold in More Than 500 Invoices

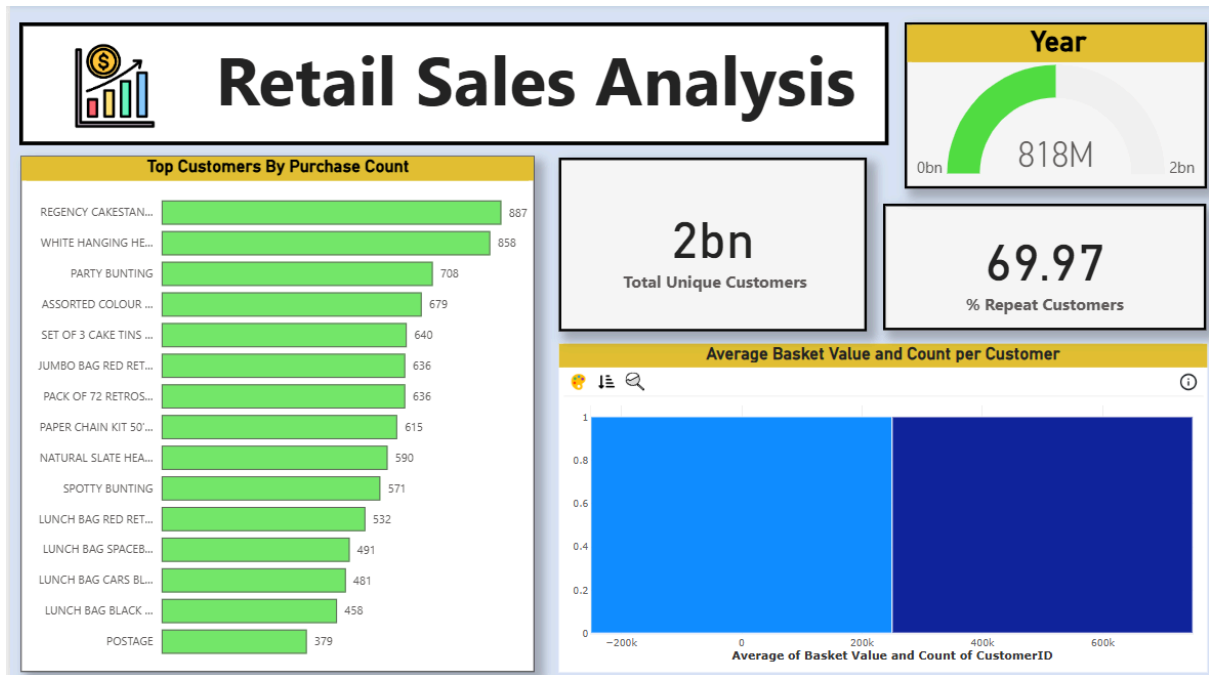


3. Customer Segmentation Page

Repeat Customers %

Average Basket Value per Customer

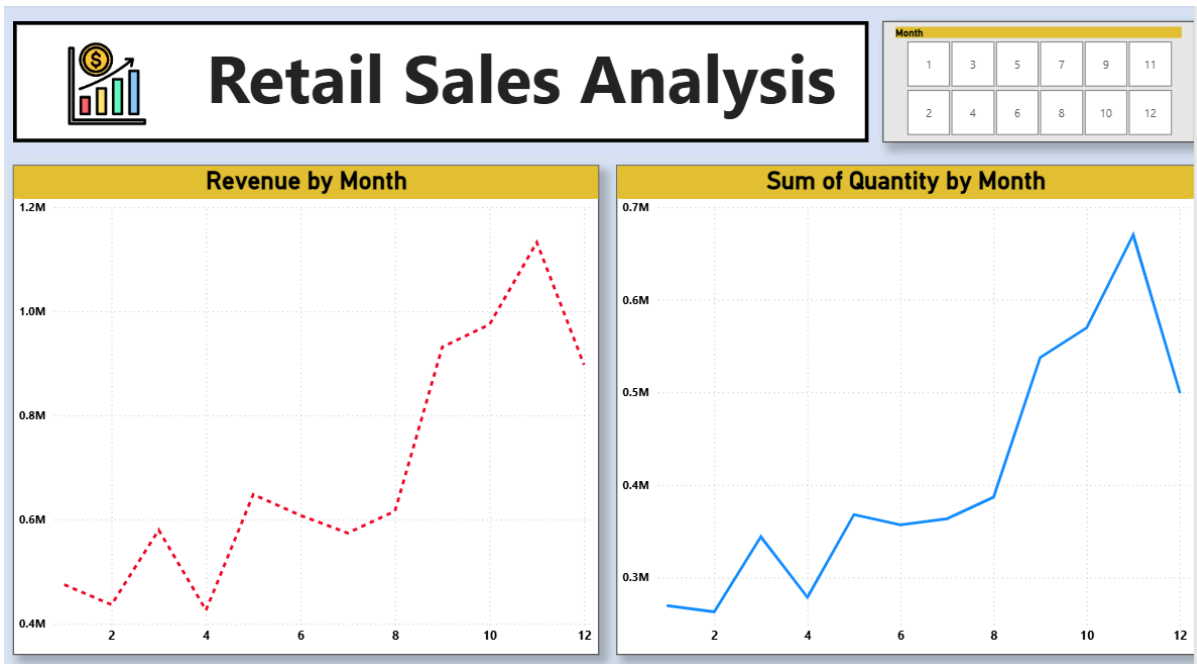
Top Customers by Purchase Count



4. Monthly Trends Page

Line Chart: Monthly Revenue

Date Slicer: Year/Month Filter



5. Returns Analysis

KPI Card: Transactions with Negative Quantity

Table: All Transactions Marked as Returns

Retail Sales Analysis

Country

AustraliaCzech Republic
AustriaDenmark
BahrainEIRE
BelgiumEuropean Community
BrazilFinland
CanadaFrance
Channel IslandsGermany
CyprusGreece

InvoiceNo	Count of CustomerID	Sum of Quantity	Sum of UnitPrice	Description	Country	Year	Quarter	Month	Day
C538971	1	-48	0.42	ANGEL DECORATION STARS ON DRESS	Austria	2010	Qtr 4	December	15
C556793	1	-1	2.95	GREEN REGENCY TEACUP AND SAUCER	Austria	2011	Qtr 2	June	14
C556793	1	-5	4.25	KINGS CHOICE BISCUIT TIN	Austria	2011	Qtr 2	June	14
Total	3	-54	7.62						

2

Negative Transaction

Key Insights Extracted

Highest sales revenue observed is: **[554.6 K]**

Top-selling products include: **[Top 10 Products]**

Repeat customers contribute **[69.97 %]** of total customer base.

Monthly sales peaks during: **[November]**

Returns account for approximately **[2]** out of total transactions.

Notes

The report was created using Power BI Desktop for personal projects.

Power BI Service deployment experience through training is included, though personal account publishing is not shown.

.pbix file and dashboard screenshots are available upon request.