

# E- SHOP PRO COHORT ANALYSIS

E-Shop Pro, a global e-commerce retailer, has achieved significant customer acquisition success. However, it faces difficulties in retaining customers over time.

## BUSINESS PROBLEM

While many new customers make an initial purchase, fewer return for repeat purchases, resulting in a declining repeat purchase rate, increased customer churn, and lower engagement levels. These trends negatively impact Customer Lifetime Value (CLV) and overall profitability.

## EXPLORATORY DATA ANALYSIS

- ✓ Data Cleaning
  - Removed 135,080 null CustomerID entries to ensure accuracy.
- ✓ Insights Summary
  - Identified Top 5 countries with the most unique customer visits.
- ✓ Trend Analysis
  - Analyzed monthly revenue for the past year

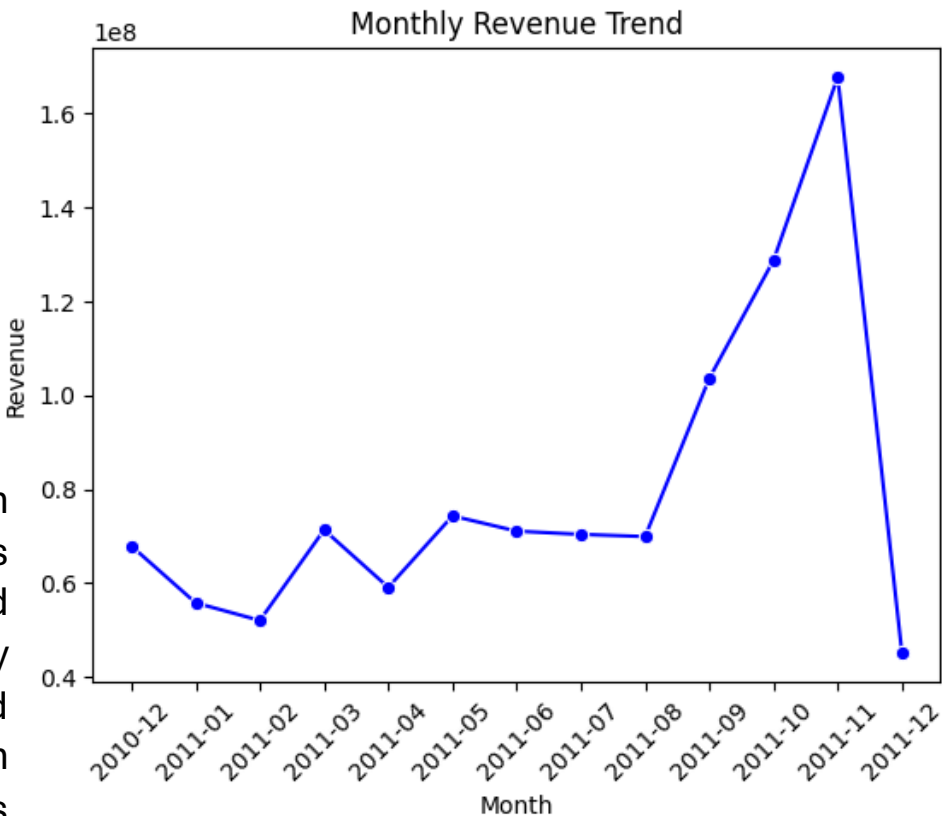
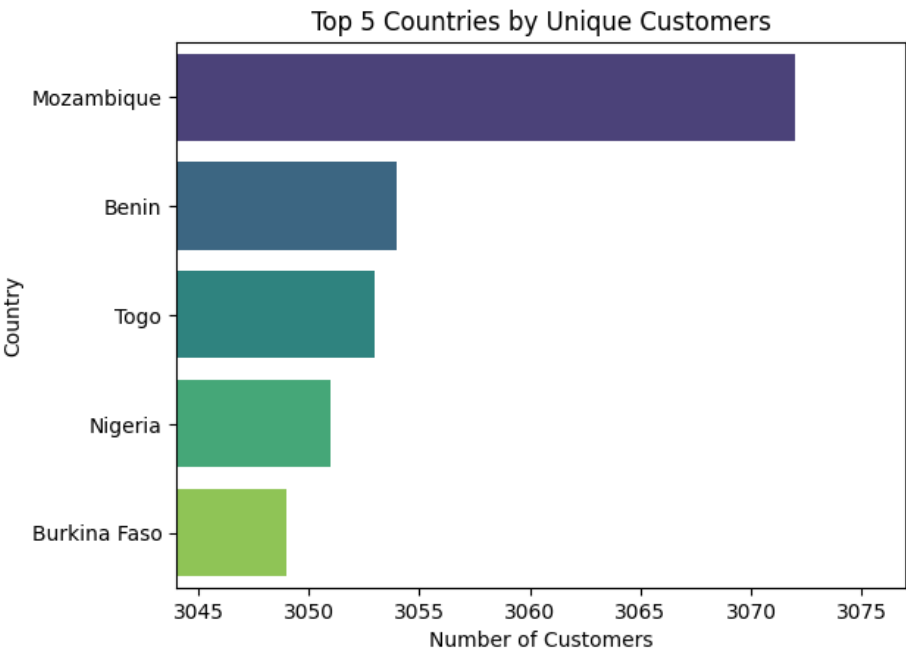
## COHORT ANALYSIS

Cohort analysis groups customers based on the month of their first purchase and tracks activity in subsequent months. This method allows us to measure retention, identify when customers are likely to churn, and assess the effectiveness of retention strategies. Each cohort provides insights into how long customers remain active after joining.

Example:  
**Dec 2010 Cohort** → 948 customers joined → only 362 remained after 1 month (~38%).  
Similar trends across other cohorts → indicates early churn risk.

## CONCLUSION

- High initial churn: Customers often drop off after first purchase.
- Retention challenge: Very few stay active beyond 3–5 months.
- Business impact: Increased acquisition costs, low CLV.



CohortMonth	1	2	3	4	5
2010-12	948	362	317	367	341
2011-01	421	101	119	102	138
2011-02	380	94	73	106	102
2011-03	440	84	112	96	102

