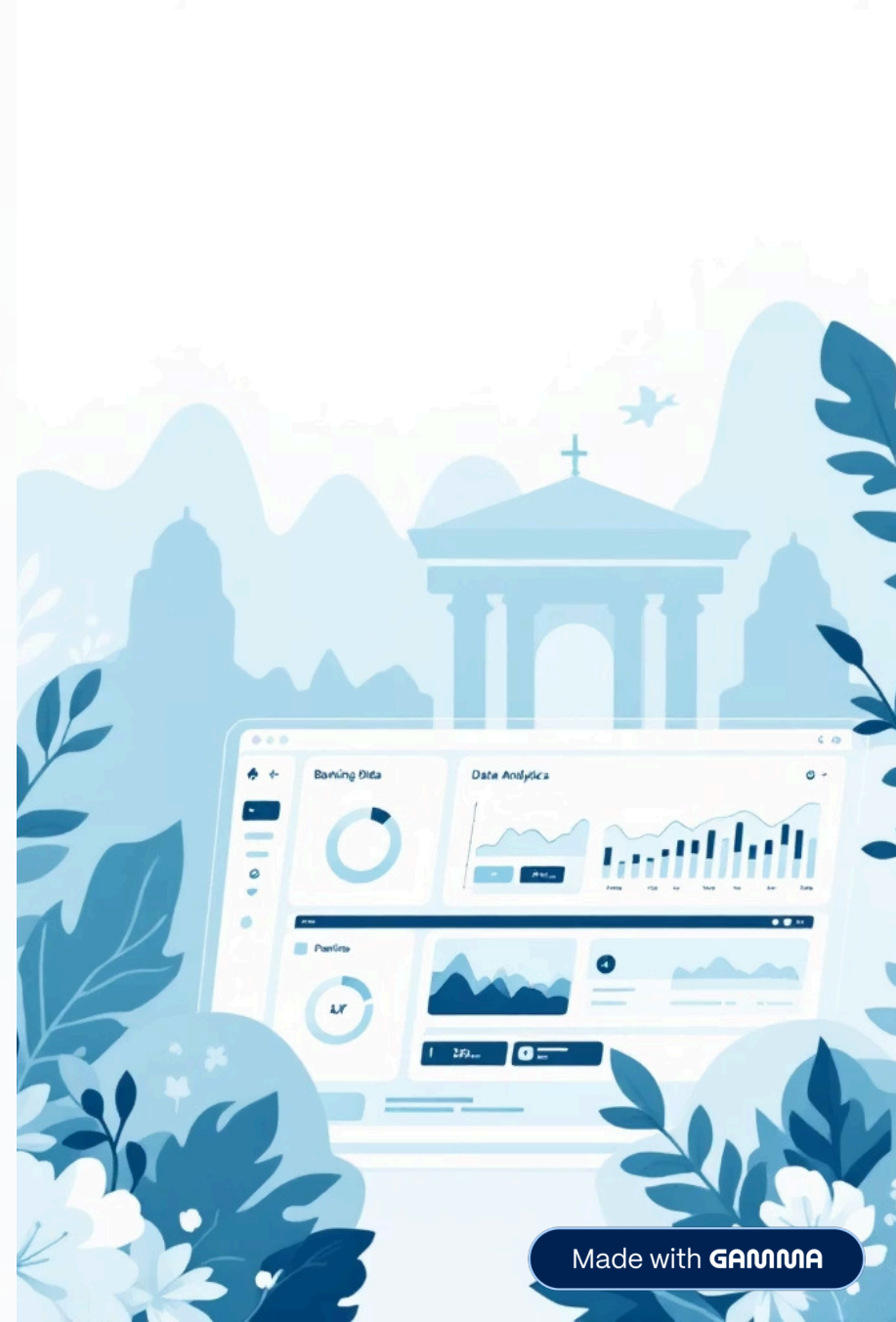# Bank Customer Churn Analysis

Using Excel and SQL to identify at-risk customers and reduce churn

DIVYA MISHRA | SKILLUP ONLINE

Understanding Customer Churn

The Challenge

Customer churn occurs when customers stop using bank services or close accounts. Retaining existing customers is more cost-effective than acquiring new ones, making churn analysis critical for financial institutions.

> Churn analysis helps banks identify at-risk customers before they leave

Project Objectives

Calculate Churn Rate

Determine overall customer churn percentage

Demographic Analysis

Analyze churn by age, gender, and geography

Financial Indicators

Study relationships between churn, balance, and credit scores

Identify Risk Profiles

Pinpoint high-risk customer segments

Actionable Insights

Provide data-driven recommendations to reduce churn

Dataset Overview

10K

Total Customers

Comprehensive dataset with unique customer IDs
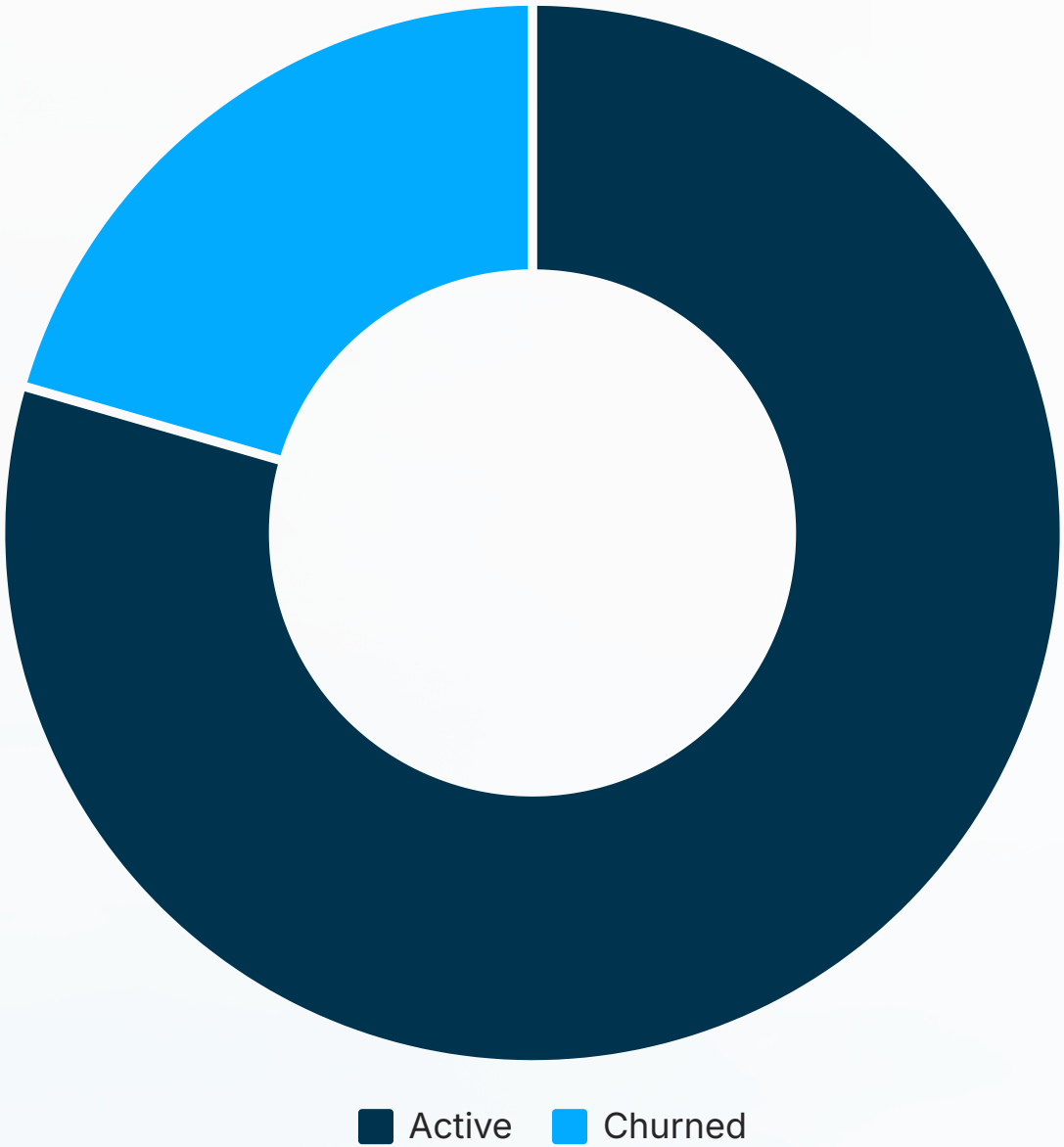
13

Key Variables

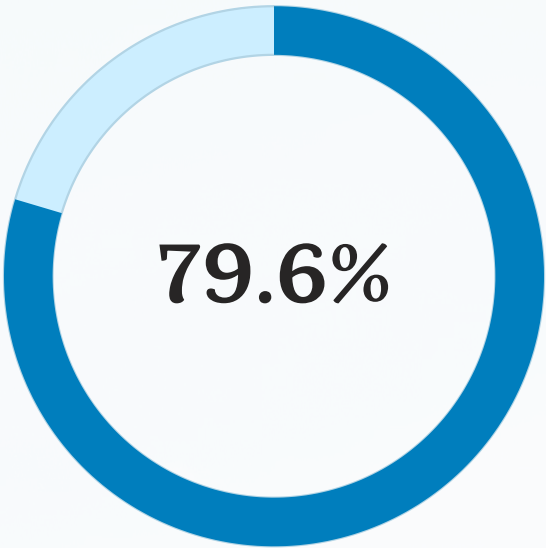Demographics, financials, and behavior metrics

Core Data Points

- Customer demographics (age, gender, geography)
- Financial metrics (credit score, balance, salary)
- Banking behavior (tenure, products, activity status)
- Churn indicator (exited: 1=churned, 0=active)
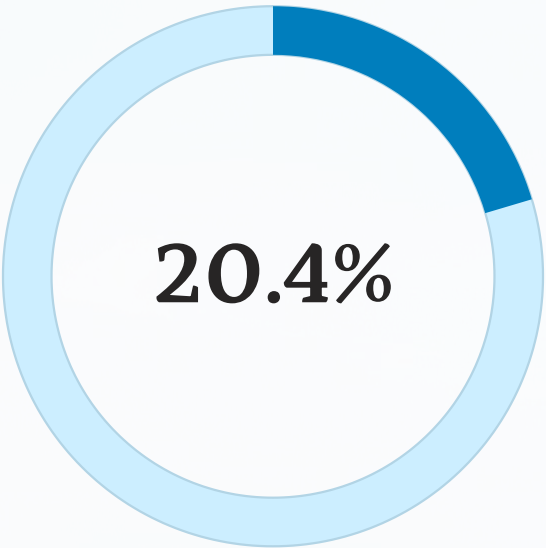
Churn Status Breakdown

- Active
- Churned

Customer Retention Overview

Out of 10,000 customers analyzed, 2,038 have churned while 7,962 remain active. This represents a **20.38% overall churn rate**.
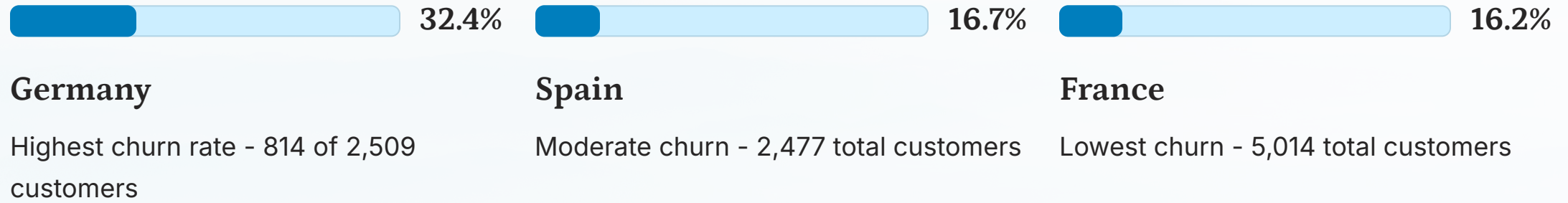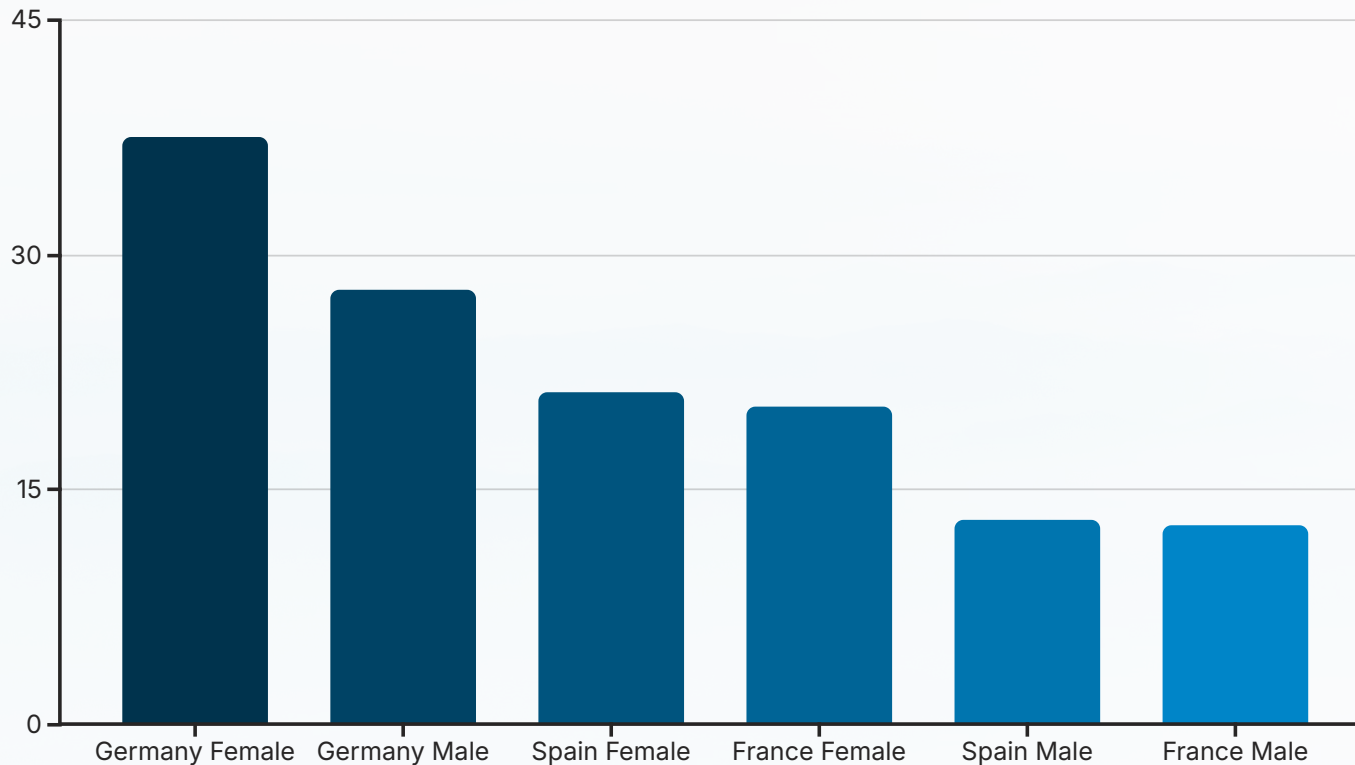

79.6%

Retention rate

20.4%

Churn rate

Geography: The Strongest Churn Predictor

32.4%

Germany

Highest churn rate - 814 of 2,509 customers

16.7%

Spain

Moderate churn - 2,477 total customers

16.2%

France

Lowest churn - 5,014 total customers
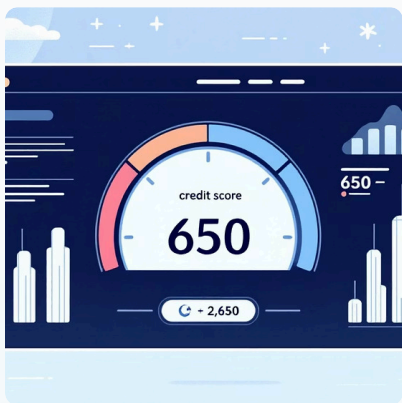
Gender and Geographic Patterns

Key Insight

Female customers in Germany show the highest churn rate at **37.55%**, significantly above the overall average. Male customers in France have the lowest churn at 12.75%.
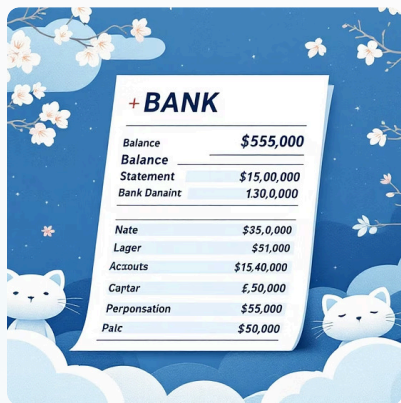
Total gender distribution: 5,457 male and 4,543 female customers across all regions.

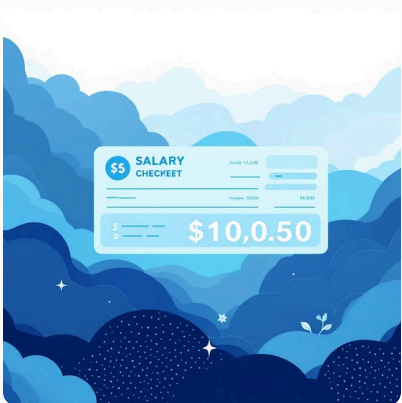Made with GAMMA

Financial Profile of Churned Customers

Average Credit Score

Churned customers: 642-648 across regions. Overall average: 650.53

Average Balance

Churned: $91,109. Germany highest at $120,361. Active customers: $72,743

Estimated Salary

Female: $100,602. Male: $99,665. Minimal gender difference in income

High-Risk Customer Indicators

Critical Risk Factors

Multiple indicators point to customers most likely to churn

Product Count

3 products: 82.71% churn. 4 products: 100% churn. Sweet spot: 2 products at 7.60%

Account Activity

Inactive members show significantly higher churn risk. Only 46 active members have 3+ products

Zero Balance

3,617 customers with zero balance represent dormant accounts at high risk

No Credit Card

20.81% churn rate among customers without credit cards

Key Recommendations

01

Focus on Germany

Implement targeted retention programs for German customers, especially females, given the 32.44% churn rate

02

Optimize Product Mix

Encourage 2-product adoption (7.60% churn) while investigating why 3+ products drive churn above 80%

03

Activate Dormant Accounts

Re-engage 3,617 zero-balance customers and inactive members through personalized campaigns

04

Monitor High-Balance Customers

5,345 customers with above-average balances who churned represent significant revenue loss—prioritize retention