

## 1. EXECUTIVE SUMMARY

This analysis addresses a **21.19% churn rate** within a global banking dataset. By engineering a data pipeline in **SQL** and developing an interactive **Power BI** suite, this project identifies exactly where revenue is leaking. The core finding reveals that churn is not random but concentrated in specific high-value age groups (50+) and geographic regions (Germany). Implementing the recommended loyalty and engagement shifts could stabilize over **\$5.08 billion** in at-risk balances.

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## 2. PROJECT OBJECTIVE

The primary goal was to move the bank from **descriptive analytics** (knowing what happened) to **prescriptive analytics** (knowing what to do).

- **Identify** high-risk customer segments based on demographics and behavior.
  - **Uncover** friction points in current product offerings (Credit Cards).
  - **Provide** actionable, non-technical recommendations to the management team to improve customer lifetime value (LTV).
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## 3. STRATEGIC FINDINGS

### A. The "Age Hotspot" Risk

- **Observation:** There is a massive surge in attrition between ages **52–56**, where churn peaks at **71.56%**.
- **Insight:** This is the "Wealth Transition" phase. Customers in this bracket are likely looking for more stability or better retirement-focused products which they aren't finding here.

### B. Regional Performance Gap

- **Observation:** **Germany** is losing customers at a rate of **32.26%**, nearly double the rate of France or Spain.
- **Insight:** This suggests a localized issue—possibly uncompetitive interest rates or superior digital offerings from local German competitors.

### C. Product Usage Paradox

- **Observation:** Customers with **Credit Cards** are churning faster than those without.
- **Insight:** The credit card is currently a "low-stickiness" product. It isn't offering enough value or rewards to keep the customer tied to the bank.

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## 4. STRATEGIC RECOMMENDATIONS

### Priority 1: Legacy Loyalty Program

- Create a specialized "Gold Tier" for customers aged 50+.
- **Action:** Offer preferential rates on Fixed Deposits or Wealth Management services to "lock in" these high-balance individuals.

### Priority 2: Milestone Retention

- Data shows peaks at **1-year** and **9-year** tenures.
- **Action:** Launch automated "Retention Gifts" or fee waivers at the 11-month and 8-year marks to intercept customers before they decide to leave.

### Priority 3: Re-activation of Inactive Members

- Inactive members are the highest churn risk.
- **Action:** Trigger personalized "We Miss You" app notifications with a limited-time incentive for customers who haven't performed a transaction in 30 days.

### Priority 4: Credit Card Value Revamp

- **Action:** Introduce "Tenure-Based Cashback." The longer you stay with the bank, the higher your credit card rewards become. This makes it "expensive" for the customer to leave.