





Insights and Recommendations

Customer Attrition Overview: Out of 10,127 customers, 1,627 have churned (16.1% attrition rate), putting \$44.6M in revenue at risk. The analysis revealed that female customers show higher attrition (930 vs 697 males), low-income customers (<\$40K) have the highest churn rate with 612 attritions, and graduate customers unexpectedly show high attrition (487), suggesting unmet expectations. The core customer base aged 40-59 represents the primary revenue segment requiring focused retention efforts.

Critical Behavioral Patterns: Customer inactivity emerges as the strongest predictor of churn, with customers inactive for **6+ months showing 51.72% churn rate** versus only 15-18% for those active within 3 months. A surprising **product paradox** reveals that customers with 3 or 6 products show unexpectedly high churn rates, challenging traditional cross-selling assumptions. Married customers lead in total attritions (709), followed by singles (668), indicating the need for life-stage specific retention strategies.

Strategic Recommendations: Immediate actions include deploying **inactivity alerts** for customers reaching 3+ months of inactivity and launching **targeted retention campaigns** for high-risk segments. The bank should develop **value-driven banking solutions** with reduced fees for low-income customers and conduct **graduate customer surveys** to understand their unmet needs. Product optimization should focus on reviewing customers with 3+ products for satisfaction, while implementing **gender-specific campaigns** to address the higher female attrition rate.

Expected Business Impact: Implementing these data-driven strategies, supported by a **machine learning model achieving 96.5% accuracy**, could reduce churn by **20-30%** and protect **\$2-3M annually**. The 5x cost advantage of retention over acquisition makes this a critical business priority, with success measured through monthly churn rate reduction, improved customer lifetime value, and enhanced satisfaction scores across all demographic segments.





