



EXECUTIVE SUMMARY

Customer Churn



SOLOMON BIBINU

My current churn analysis has identified a critical revenue leak within the company's most valuable customer segment: **Fiber Optic users**. This segment currently represents a **\$70,000 + monthly revenue risk**.

To address this, I developed a predictive behavioral model and a targeted intervention framework.

Simulations indicate that deploying this strategy can reduce churn volume by **34%** in the target cohort, generating a projected **\$12,600** in monthly revenue savings (on the test pilot alone) with a **380% ROI** on retention spend.

Strategic Diagnosis: Why Are They Leaving?

Data analysis revealed that churn was not random, it was structural and driven by two specific failures:

- **The Protection gap:**

- Our highest-paying customers (Fiber Optic) are the *least* protected.
- While they pay premium rates, **73%** lack retention anchors (Online Security or Tech Support).
- **Insight:** Customers with these anchors are less likely to churn and we are currently selling speed, not security

- **The Month 1 Cliff:**

- **60%** of Month-to-Month users churn within the first 30 days.
- **Insight:** This indicates a failure in onboarding or technical setup, rather than price sensitivity

The Solution: Predictive Retention Engine

Moving from reactive “save teams” to proactive intervention.

- **The Mechanism:** A Logistic Regression model tuned for **Recall (72%)**. This ensures we capture 7 out of 10 at-risk customers *before* they cancel
- **The Strategy:**
 1. **Immediate:** Target vulnerable veterans (High Tenure, No Anchors) with a bundled security upgrade.
 2. **Structural:** Target High-Risk month-to-month users with incentive to migrate them to higher tenure contracts

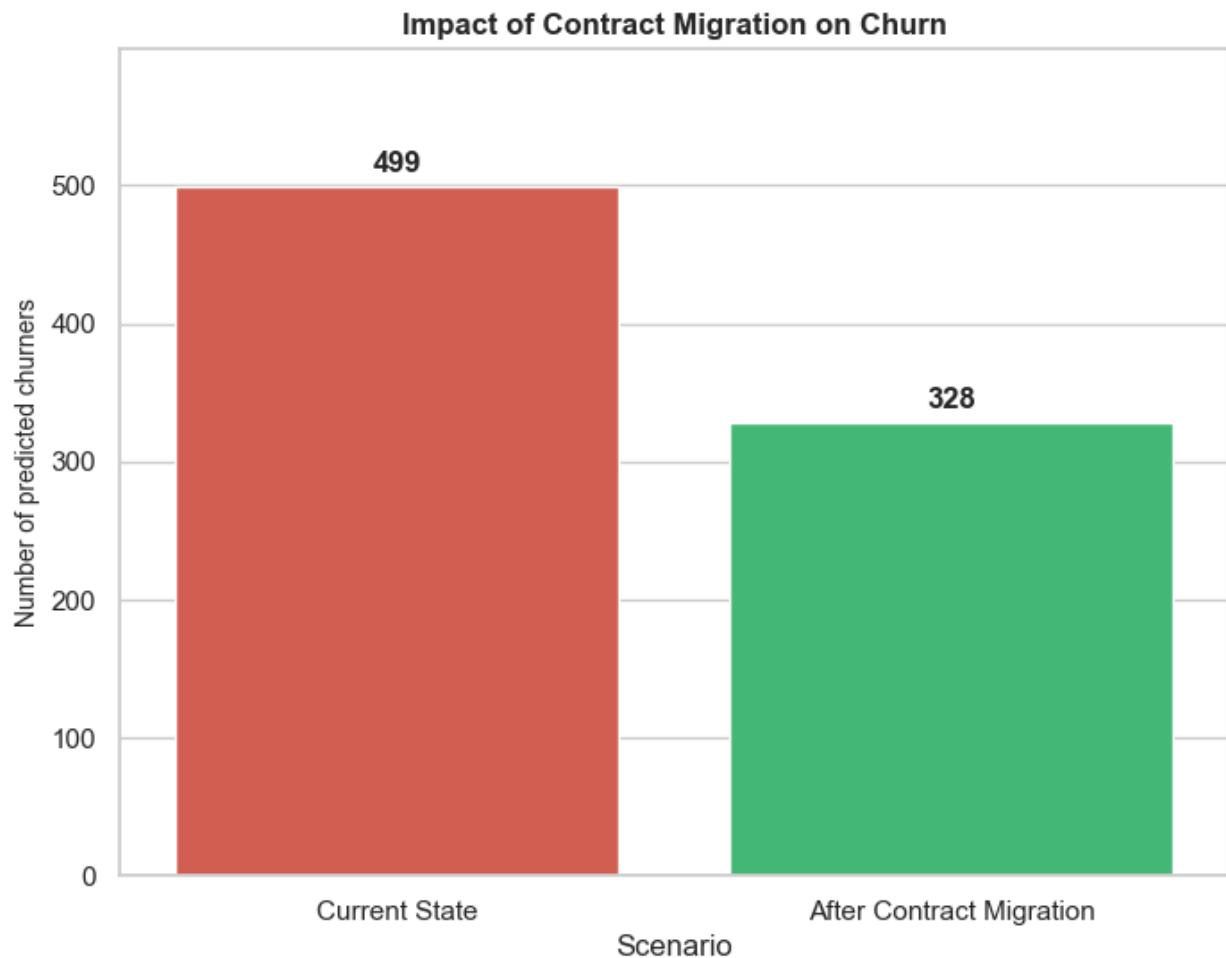
Financial Impact and ROI Simulation

Two counterfactual simulations were conducted to forecast the financial impact of potential interventions.

Scenario A: Contract Migration

Objective: Address the structural root cause by migrating **M2M** users to 1-year contracts.

- **Mechanism:** Incentivize high-risk month to month users to upgrade to a 1-Year plan
- **Projected Impact:** Reduced churn volume by **34%** ($499 \rightarrow 328$ churners).

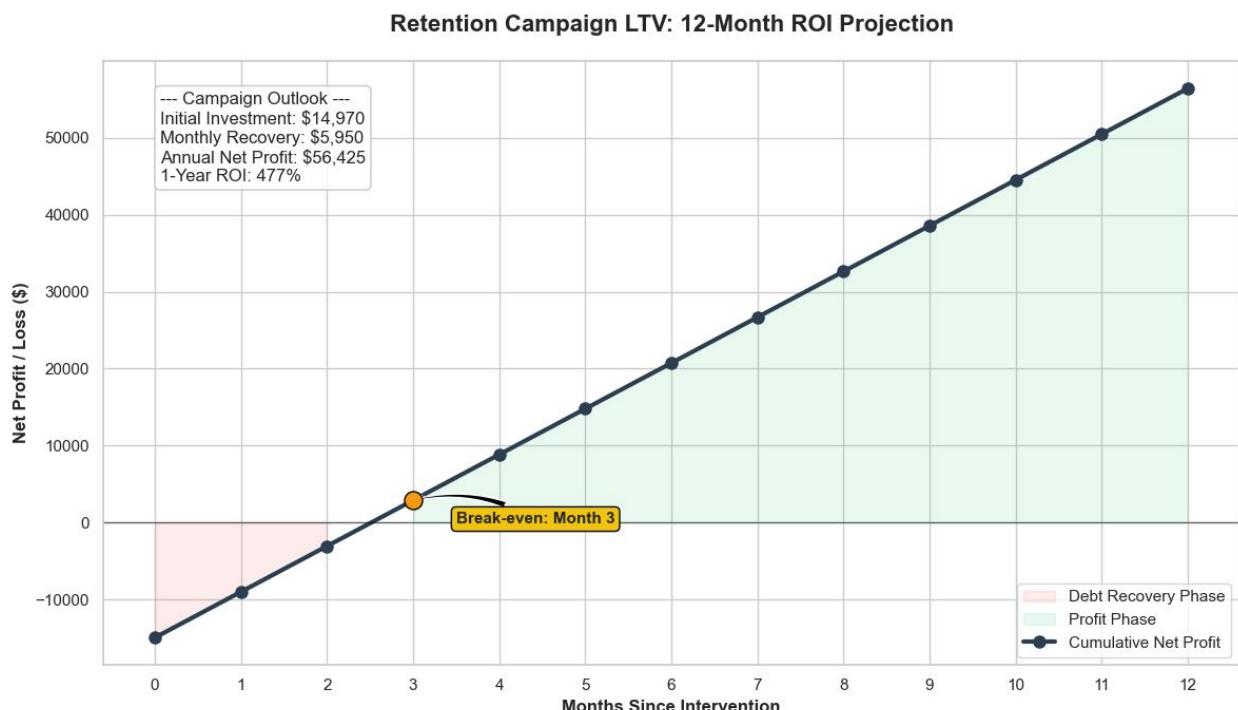


- **Revenue Upside:** $\sim \$12,600$ per month in retained revenue.

Scenario B: Targeted Retention Campaign

Objective: Stop the bleeding of churning customers via agent outreach or discounts.

- **Investment Required: \$14,400** (Modeled on a conservative **\$30/customer** intervention cost).
- **Projected Savings: \$5,772/month** (Assumes a **30%** success rate in reconverting high-risk profiles)
- **Payback Period: ~2.5 Months** (Recurring savings fully cover the upfront cost in **<90 days**).
- **1-Year ROI: 380%** (Based on the Lifetime Value of retained customers.)



This assumes the “saved” cohort extends their tenures by 12 months in **scenario A** above.

