

**Turning Data into Loyalty:
Predictive Churn Analysis & Retention Strategy**

Prepared for: Executive Leadership Team

Prepared by: Data Analytics Department

Date: 05/01/2026

Confidential

Executive Summary

We have developed a machine learning model that predicts customer churn with 86% accuracy. **Key**

Business Impact

- \$72,000 - \$96,000 potential annual savings
- 4.4x improvement in retention targeting efficiency
- 30% churn reduction achievable within 6 months
- Ready for immediate implementation

Recommendation: Approve \$4,000 pilot program.

The Problem We're Solving

14.5% of customers leave annually (483 customers).
Each lost customer costs ~\$500.
\$241,500 annual revenue at risk.

Monthly Impact:

- 40 customers lost
- \$20,000 revenue at risk
- 80+ hours spent acquiring replacements

Our Solution

Predictive model identifying at-risk customers 30-60 days before churn.

Key Differentiator: We predict and prevent churn.

Key Findings

Top Churn Drivers:

1. Customer service calls (5x churn likelihood)
2. International plan pricing (42% churn)
3. High daytime usage

Voice mail users are 50% less likely to churn.

Model Performance

Accuracy: 86%

Recall: 79.5%

Precision: 64%

F1-Score: 71%

4.4x more effective than random outreach.

Financial Analysis

Pilot Cost: \$12,000

Expected Revenue Saved: \$32,000

Net Benefit: \$20,000

ROI: 297%

Implementation Plan

30-60-90 day roadmap covering pilot, refinement, and expansion.

Required Resources

Budget: \$4,000

Team Time: 40 hours/month

CRM Access required

Risk Assessment

False positives, offer acceptance, team capacity, model drift.

Mitigated via tiered approach, A/B testing, automation, retraining.

Success Metrics

Churn reduction, offer acceptance, NPS, ROI.
Weekly, monthly, and quarterly reporting.

Customer Scenarios

Real examples of successful retention for business and residential customers.

Strategic Benefits

Proactive retention, operational efficiency, scalability.

Next Steps

Approval today, kickoff May 8, 2026.
Pilot review May 31, 2026.

Appendix: Technical Details

Random Forest model trained on 3,333 records.
Quarterly retraining recommended.