



ADVANCED ANALYTICS

CASE STUDY  
**R SYSTEMS ANALYTICS**

**A Global Telecom Operator Increased  
Customer Retention Rate by 3% With  
R Systems Analytics**

[www.rsystems.com](http://www.rsystems.com)

# Client Overview

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The client is a leading global telecom operator which provides a wide range of communication products including phone, cable TV and internet services. It serves a sizable percentage of households and businesses across the United States. Operating through a network of contact centers spread across the globe, the client provides best-in-class customer service.

## Problem Statement

- To improve customer retention rate
- Bring down the constantly growing rate of customer churn despite numerous retrospective analyses
- Analyses in practice were not substantial enough to support a preemptive mechanism to prevent on-going cancellations
- By the time data was analyzed and preventive measures were taken, the customer was already lost
- To accurately preempt which customers were likely to churn when and why
- To identify most profitable customers and develop strategy to retain them

## Primary Client Objective

- Develop a methodology that could predict possible cancellations
- Analyzing the reasons for cancellations
- Prescribe suitable remedies to reduce on-going cancellations
- Evaluate the effectiveness of retention efforts for continuous improvement

## Our Solution: Analytics GYM®

### ► Data Science

Our Analytics Consulting Engagement

### The STEPS:

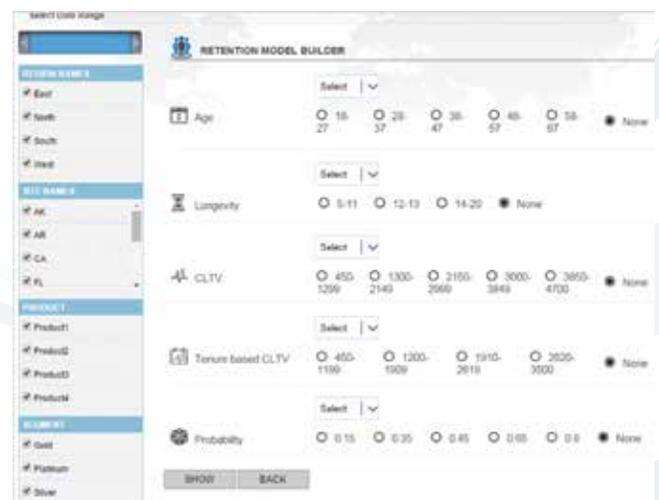
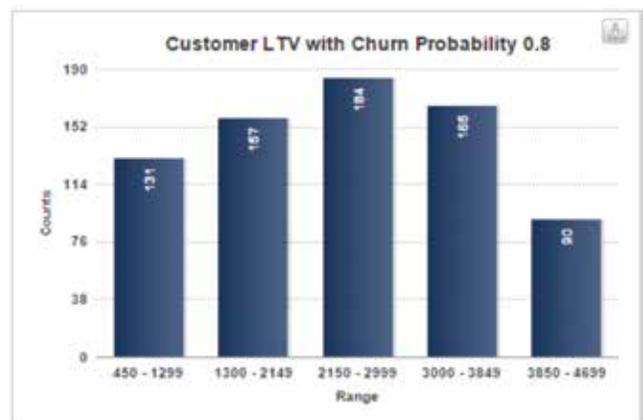
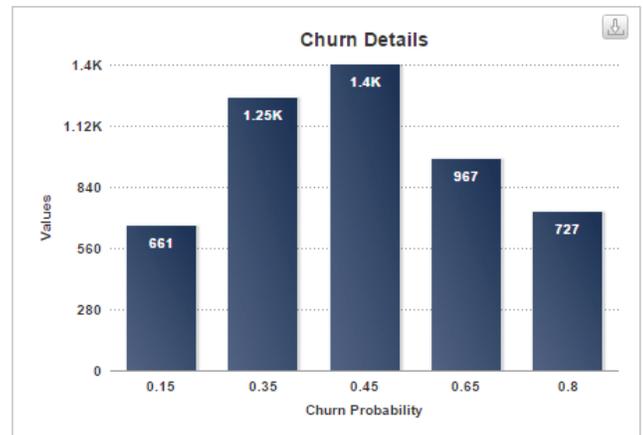
- a. Business Understanding/ Use
- b. Data Understanding/ Use
- c. Analytics and Assessment
- d. Implementation

## The Approach

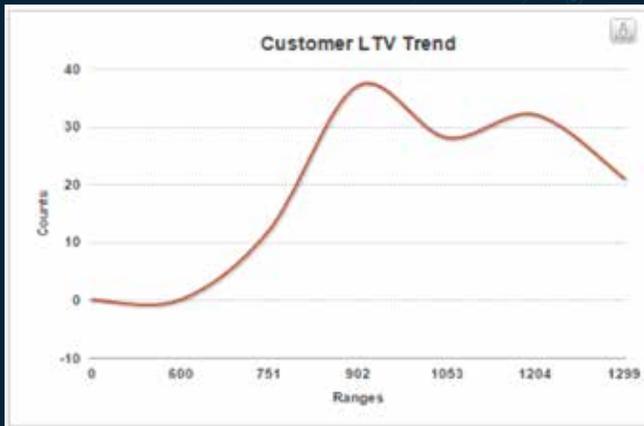
We broadly undertook the following key activities to retain the customers who were at-risk of attrition:

- Evaluated customer interactions prior to the customers' disconnect to understand churn behavior patterns and key triggers leading to cancellations of services
- Used Decision Trees, Random Forest Modelling and other predictive machine learning algorithms to predict potential churn customers
- Using our retention model builder, we helped the client in predicting the potential churn customers on variables like age, longevity, CLTV, and tenure-based CLTV
- Using the Retention Workflow, shared relevant details with the concerned team for immediate corrective actions
- Determined relevant offers for retention campaigns based on the analysis of customers' profiles and their interactions
- Prepared a customized scorecard to identify customers who were to be contacted on a priority basis with customized resolutions
- Offered customized resolutions to high-churn probability customers

The graphs below depicts the customer churn details, including churn probability, customer LTV trend, along with retention model builder and workflow integration.



# Analytics GYM®



## Scope Delivered

Using our data analytics framework, we adopted a step-by-step process to bring down the customer churn rate for the client:

- Identified a set of recently churned customers and analyzed all their calls 45 days prior to disconnection
- Detected a pattern of days taken/ calls made by customers to cancel their services
- Determined behaviors and events that triggered disconnections
- Conducted a statistical analysis to establish relationship between key triggers and cancellations
- Produced a detailed report identifying customers who met the outlined behaviors
- Analyzed/ tested results for accuracy and efficiency
- Implemented a process to contact customers with customized offers/ resolutions in order to retain them

## Key Triggers Identified

Our analytical study uncovered the following key triggers/ events that were identified as potential causes for cancellations:

- **Multiple contacts** made by the customers before disconnection
- **Ongoing Unresolved** issues stated by customers
- **Negative emotions** displayed by the customers
- **Competitor names** mentioned on calls repeatedly
- **Irregular payments** made
- **Disconnection** mentioned by customers on the calls
- **Contract expiration** inquiries made by the customers
- **Phone number portability** inquiries made by customers

## Business Outcomes

- Cost saving of approx \$4 million
- Up to 3% increase in the customer retention rate
- Deeper insights around high-churn probability customers and the root causes for opting out
- Actionable intelligence to retain profitable customers and optimize the customer lifetime value