

Churn No More: A Telecom Case Study in Proactive Management

Say Goodbye to Churn and Hello to Customer Loyalty, Increased Revenue, and Market Dominance



Introduction

Telecom Churn: Impact on Industry

This presentation showcases the benefits of implementing a proactive churn management strategy, including increased customer loyalty, revenue growth, and market share for telecom executives and decision-makers.



Proactive Churn Management

Benefits of Proactive Approach

To showcase the benefits of implementing a proactive churn management strategy including increased customer loyalty, revenue growth and market share.

- **Increased Customer Retention**

Proactive approach enables companies to identify and address customer issues before they lead to churn, resulting in higher customer retention rates.

- **Revenue Growth**

Proactive churn management helps companies retain high-value customers, leading to increased revenue and profitability.

- **Market Share**

Strategies for Proactive Churn Management



Customer segmentation based on behavior and demographics

Dividing customers into different groups based on patterns of behavior and demographics to target specific groups with tailored retention strategies



Personalized offers and recommendations

Using customer data to create customized offers, recommendations, and targeted campaigns based on individual preferences and needs



Investing in customer experience

Improving customer experience through better customer service, simplified processes, and personalized interactions to increase loyalty and reduce churn



Active feedback and complaint management

Encouraging customer feedback and actively addressing complaints to improve customer satisfaction and reduce churn



Customer engagement programs

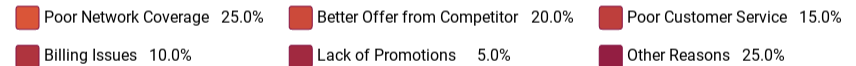
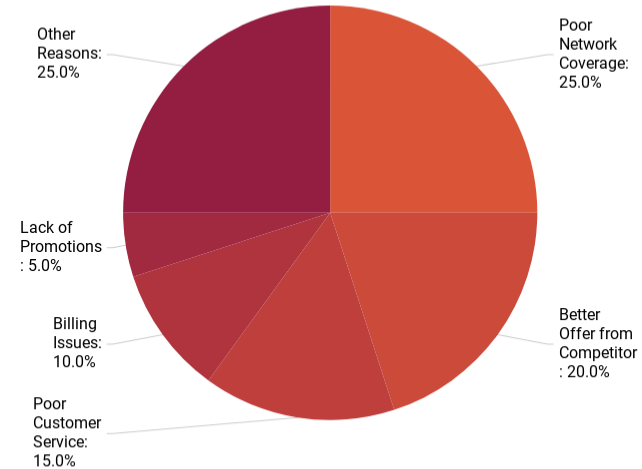
Creating engagement programs like loyalty programs, rewards, and referral programs to increase customer engagement and loyalty



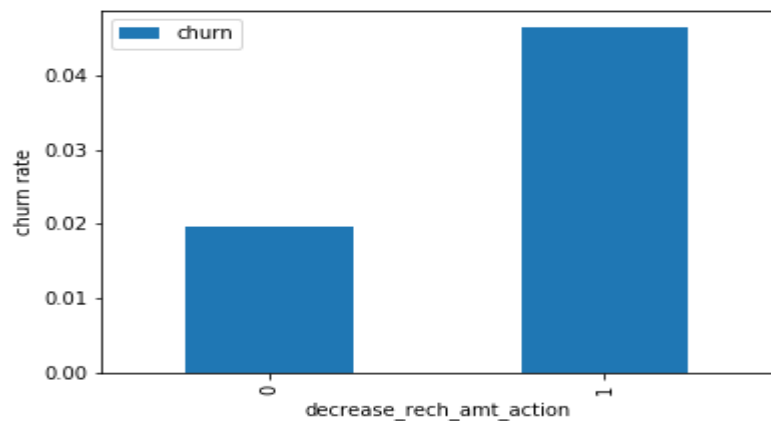
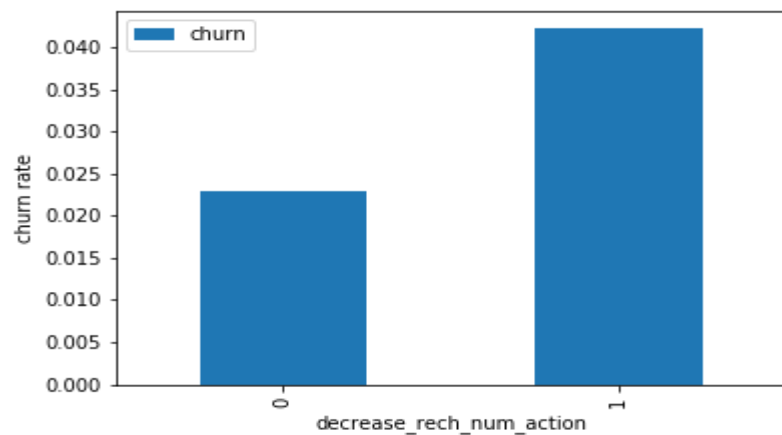
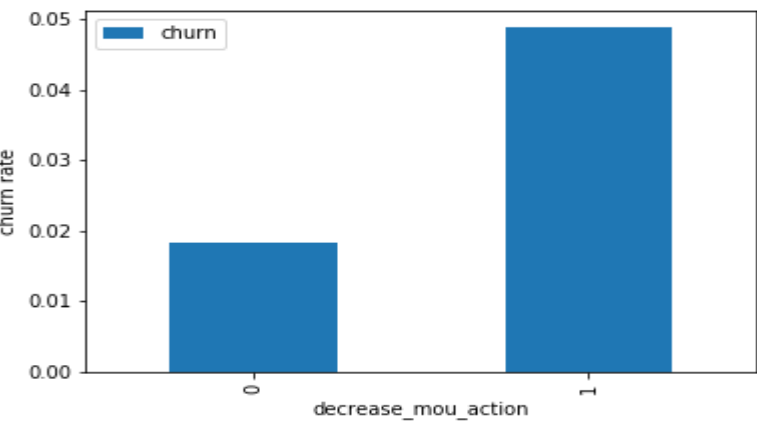
Case Study

Analysis of Telecom Churn Case Study

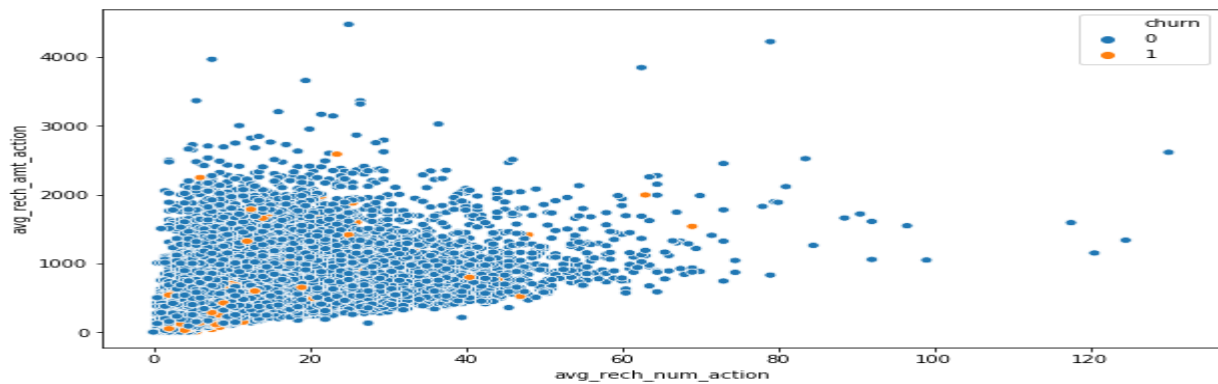
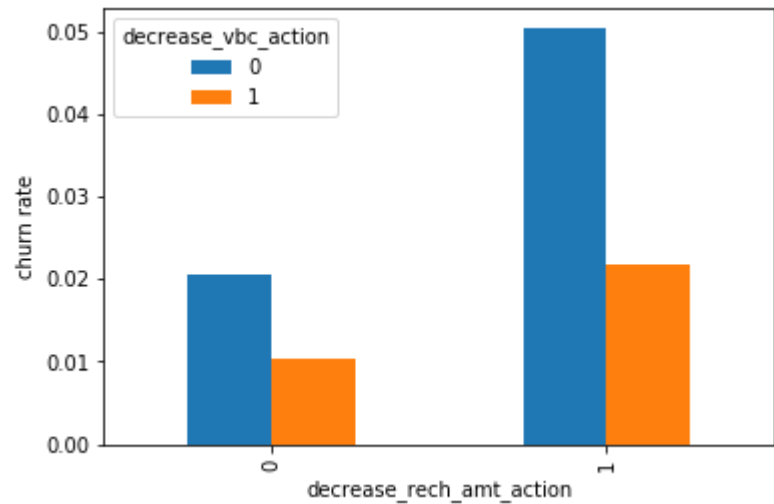
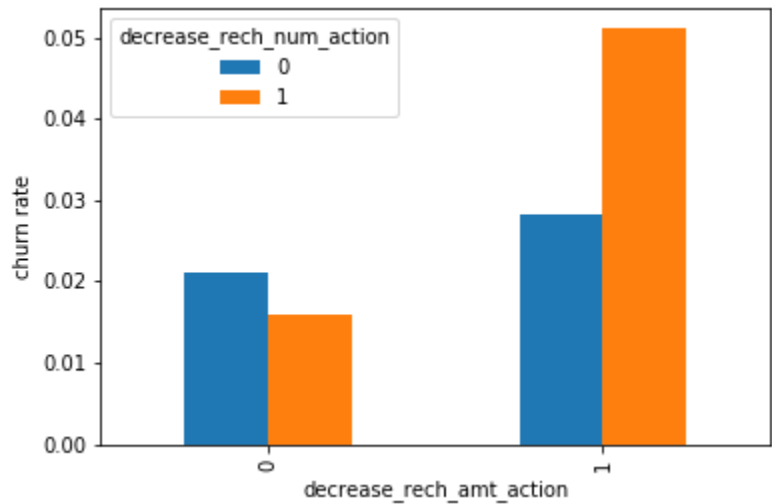
Pie Chart of Key Insights



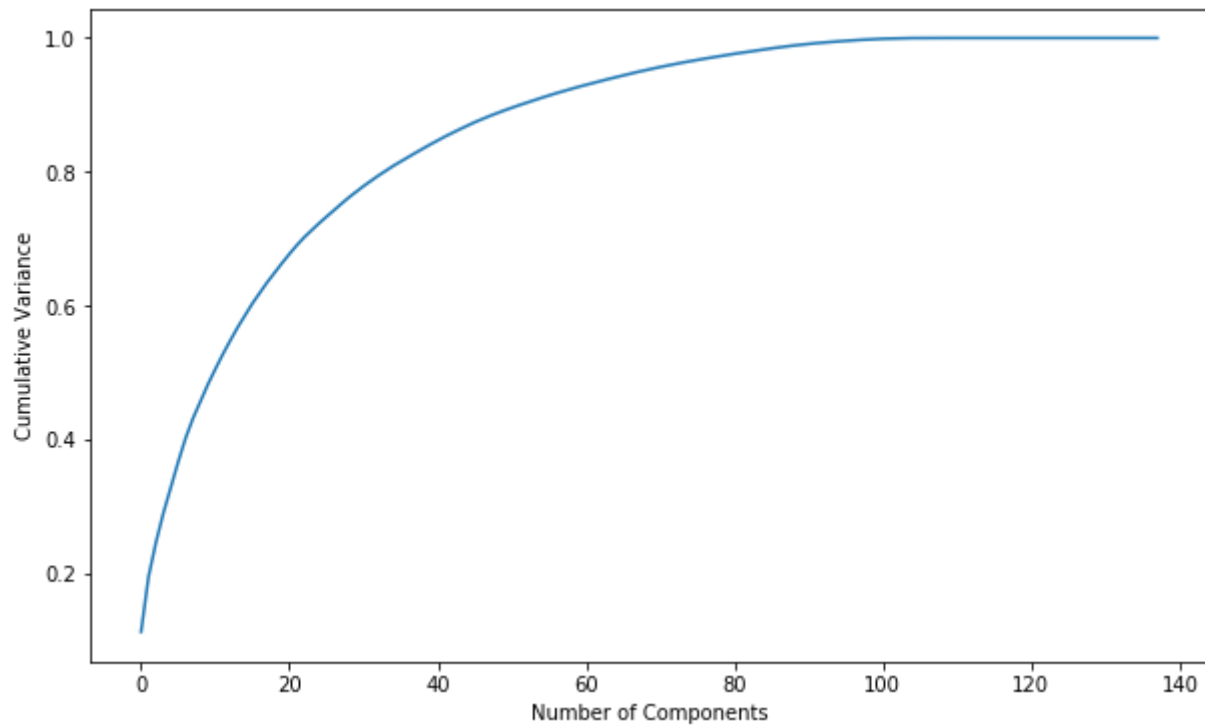
EDA – Univariate Analysis



Bivariate analysis

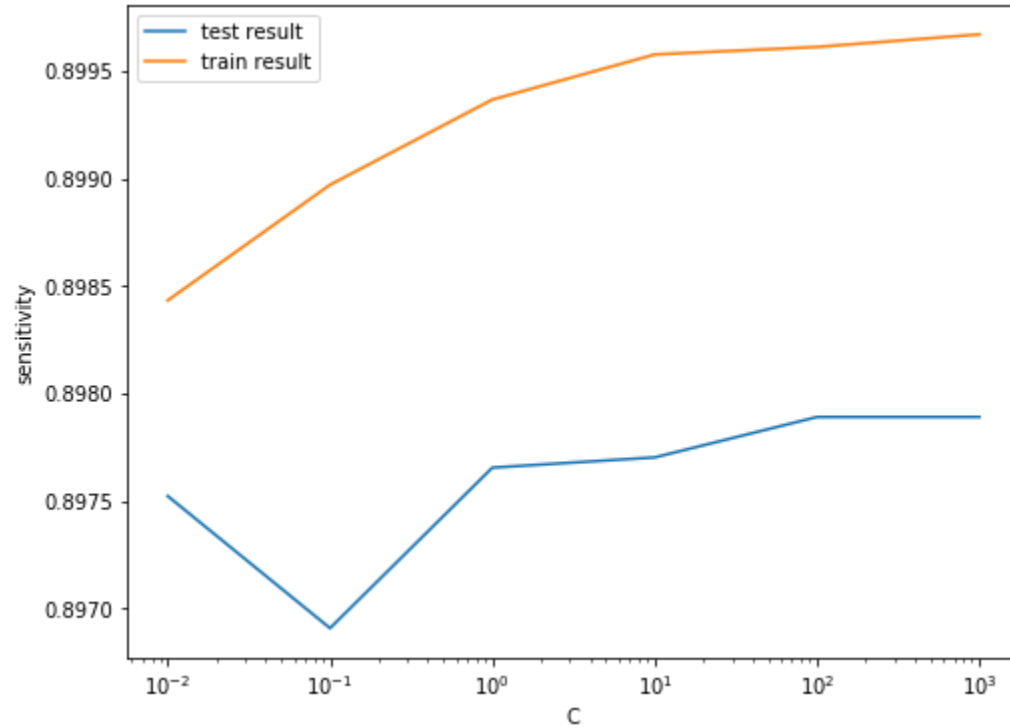


Model with PCA



We can see that 60 components explain almost more than 90% variance of the data. So, we will perform PCA with 60 components.

Logistic regression with PCA



The highest test sensitivity is 0.8978916608693863 at $C = 100$

Model summary

- Train set

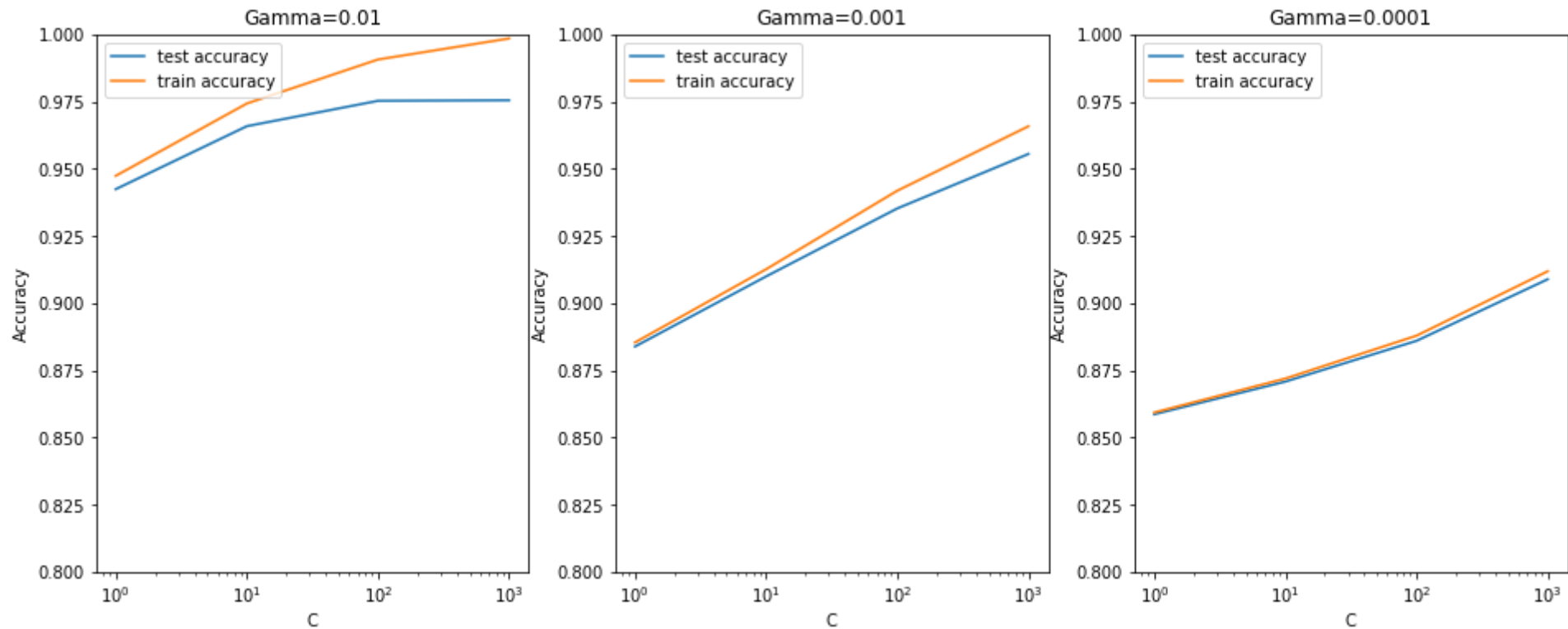
- Accuracy = 0.86
- Sensitivity = 0.89
- Specificity = 0.83

- Test set

- Accuracy = 0.83
- Sensitivity = 0.81
- Specificity = 0.83

Overall, the model is performing well in the test set, what it had learnt from the train set.

Support Vector Machine(SVM) with PCA



Model summary

- Train set

- Accuracy = 0.89
- Sensitivity = 0.92
- Specificity = 0.85

- Test set

- Accuracy = 0.85
- Sensitivity = 0.81
- Specificity = 0.85

Results and Recommendations

Telecom Churn Case Study

Recommendations for Proactive Churn Management	
Implement strategies such as personalized offers to retain customers	
Results of Churn Analysis	Identified customer churn rate of 15% and potential revenue loss of \$2 million
Benefits of Proactive Churn Management	Increased customer loyalty, revenue growth, and market share

Recommendations

- 1.Target the customers, whose minutes of usage of the incoming local calls and outgoing ISD calls are less in the action phase (mostly in the month of August).
- 2.Target the customers, whose outgoing others charge in July and incoming others on August are less.
- 3.Also, the customers having value based cost in the action phase increased are more likely to churn than the other customers. Hence, these customers may be a good target to provide offer.
- 4.Cutomers, whose monthly 3G recharge in August is more, are likely to be churned.
- 5.Customers having decreasing STD incoming minutes of usage for operators T to fixed lines of T for the month of August are more likely to churn.
- 6.Cutomers decreasing monthly 2g usage for August are most probable to churn.
- 7.Customers having decreasing incoming minutes of usage for operators T to fixed lines of T for August are more likely to churn.
- 8.roam_og_mou_8 variables have positive coefficients (0.7135). That means for the customers, whose roaming outgoing minutes of usage is increasing are more likely to churn.



Closing

Summary and Key Takeaways

Implementing a proactive churn management strategy can lead to increased customer loyalty, revenue growth, and market share.