Customer Churn Prediction Report

Generated on January 28, 2026 at 09:05 AM

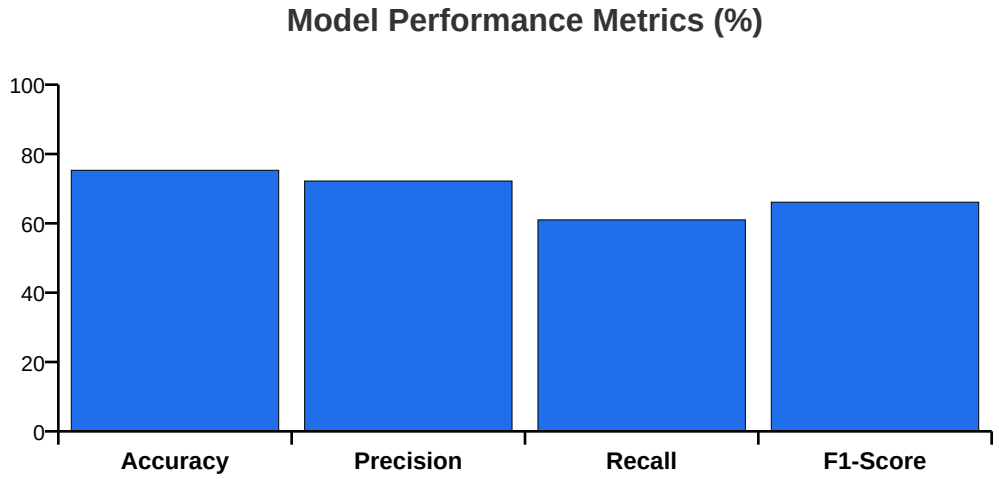
■ Model Performance Report

Model Information

Property	Value
Algorithm	Random Forest
Training Date	January 2026
Training Samples	4,000
Test Samples	1,000
Features Used	10

■ Model Performance Metrics

The predictions in this report were generated using **Random Forest** model.



Metric	Value	Description
Accuracy	75.3%	Overall correct predictions
Precision	72.2%	Correct churn predictions out of all churn predictions
Recall	61.0%	Churners correctly identified out of all actual churners
F1-Score	66.1%	Harmonic mean of precision and recall

Confusion Matrix

	Predicted Stay	Predicted Churn
Actual Stay	122	13
Actual Churn	42	23

Feature Importance

Feature	Importance	Impact
Last Login Days	25%	High - More days since login increases churn risk
Payment Failures	20%	High - Payment issues strongly predict churn
Login Frequency	15%	Medium - Lower frequency indicates disengagement
Watch Time	12%	Medium - Less engagement increases risk
Tenure	10%	Medium - Newer customers more likely to churn
Support Calls	8%	Low - Mixed impact on churn
Monthly Charges	5%	Low - Minor influence
Age	3%	Low - Minimal impact
Subscription Type	2%	Low - Minimal impact