

# Customer Churn Prediction — Mwalimu Sacco

## Executive Report

This report presents a data-driven prototype developed to help Mwalimu Sacco identify members at risk of leaving or reducing engagement. By predicting churn early, Mwalimu Sacco can take proactive steps to retain members, improve satisfaction, and safeguard revenue.

**Goal:** Predict members most likely to churn (become inactive or withdraw) and recommend targeted actions to retain them.

**How It Works:** The model uses past member data (e.g., deposits, complaints, digital usage, loan history) to predict churn probability. The Streamlit dashboard allows managers to upload data, view risk categories, and simulate “what-if” retention scenarios interactively.

<b>Benefits</b>	<b>Limitations</b>
Predicts churn early, enabling proactive retention.	Requires quality and consistent historical data.
Improves targeting for loyalty and communication programs.	Predictions may vary with data changes.
Saves potential revenue loss by reducing member exits.	Model retraining needed periodically.

### Dashboard Use:

1. Upload recent member data (CSV).
2. View churn probabilities (Low, Medium, High risk).
3. Use sliders to test how increasing deposits or digital usage affects retention.
4. Export insights for management decisions.

### Conclusion:

Implementing this system can significantly improve member retention and operational efficiency. With proper data updates, Mwalimu Sacco can predict and reduce churn, ultimately increasing financial stability and member trust.