

KENYA INVESTMENT ADVISOR

AI-Powered Personalized Investment Recommendations

Tailored insights for the Kenyan market





Investment Advice Challenges

- Low financial literacy and accessibility to advisory services.
 - Overwhelming investment options.
 - One-size-fits-all investment marketing.
 - High costs of traditional services.
- 

Our Innovative Solution:

A machine learning-based recommender system
that suggests ideal investment types based on a
user's financial profile, risk tolerance, and goals.



Objectives

- Understand investment behaviors among Kenyan users
- Create user profiles with financial behavior indicators
- Build and evaluate recommender models. Example: content-based filtering, clustering + classification hybrid, and so on.

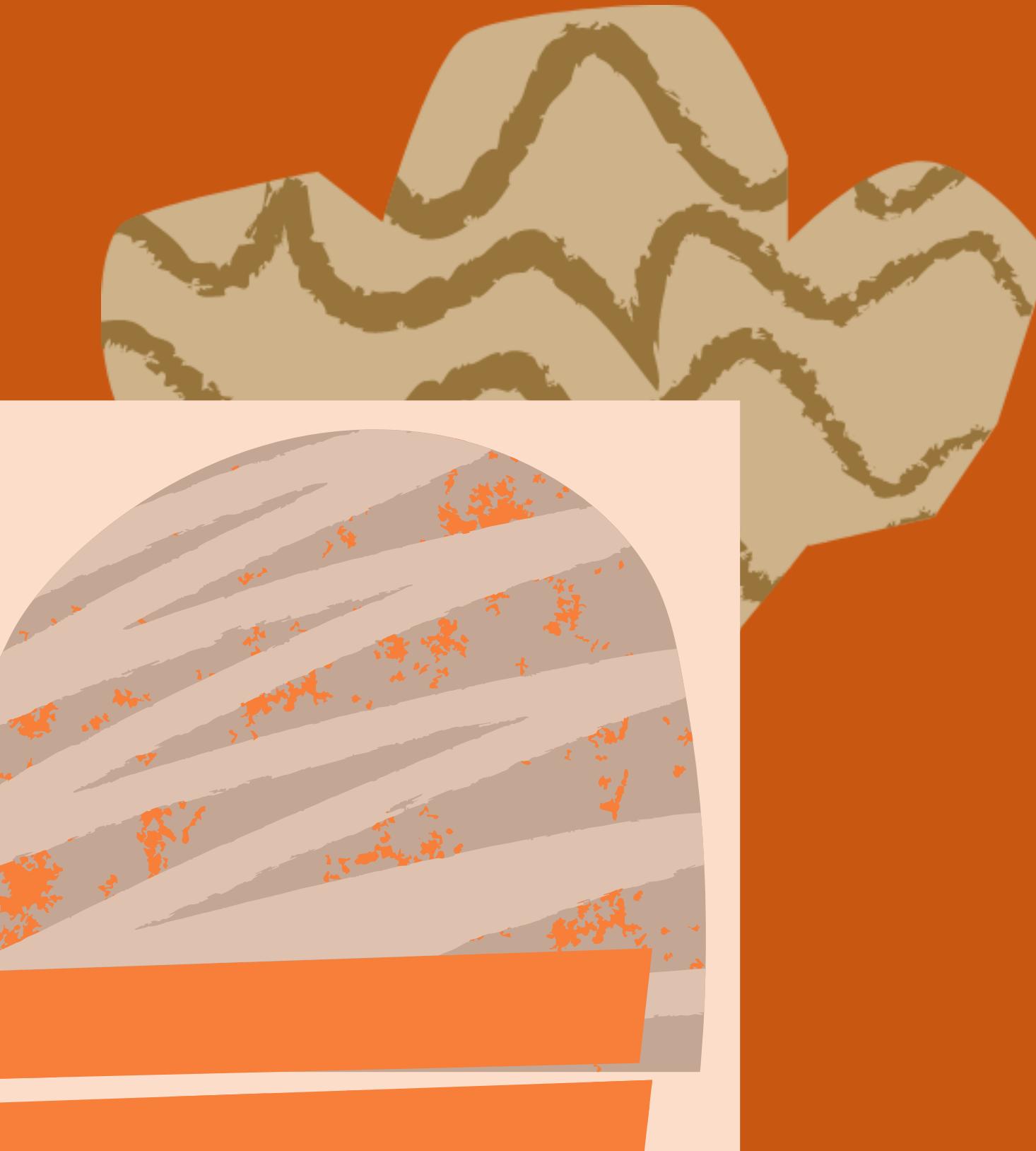
Leveraging Data for Insights

Our approach utilizes comprehensive **Kenyan data** to enhance investment recommendations through advanced machine learning techniques.

This ensures a robust recommendation system, applying a **rule-based fallback** to improve reliability and user confidence.



Models Used



Machine Learning Models.

- Trained on real-world Kenyan investment data to predict likelihood of investing and rank products.

Preprocessing Pipeline.

- Encodes demographics, financial metrics, and behavioral features into model-ready inputs.

Rule-Based Engine.

- Provides recommendations based on financial expertise when ML confidence is low.

Hybrid Approach.

- Combines AI-driven predictions with expert rules to ensure accuracy, explainability, and local market relevance.

How It Works: User Profile and Recommendations



Our platform captures user profiles and **assesses risk tolerance** to deliver tailored investment recommendations and optimal allocation strategies.

- Collects user profile: demographics, financials, preferences.
- Determines risk tolerance and user investment segment.
- Generates top investment recommendations.
- Suggests portfolio allocation and next steps.

Investment Opportunities Overview

The system covers over 16 diverse investment opportunities, ranging from low-risk options to medium-risk choices, and high to very high-risk ventures.

Each product is profiled by expected returns, liquidity, and pros and cons, enabling personalized recommendations that align with an investor's risk tolerance, financial goals, and investment horizon.



Bonds

Stable returns with **lower risk** compared to other assets.



Stocks

Higher returns potential, but **increased volatility** and risk involved.

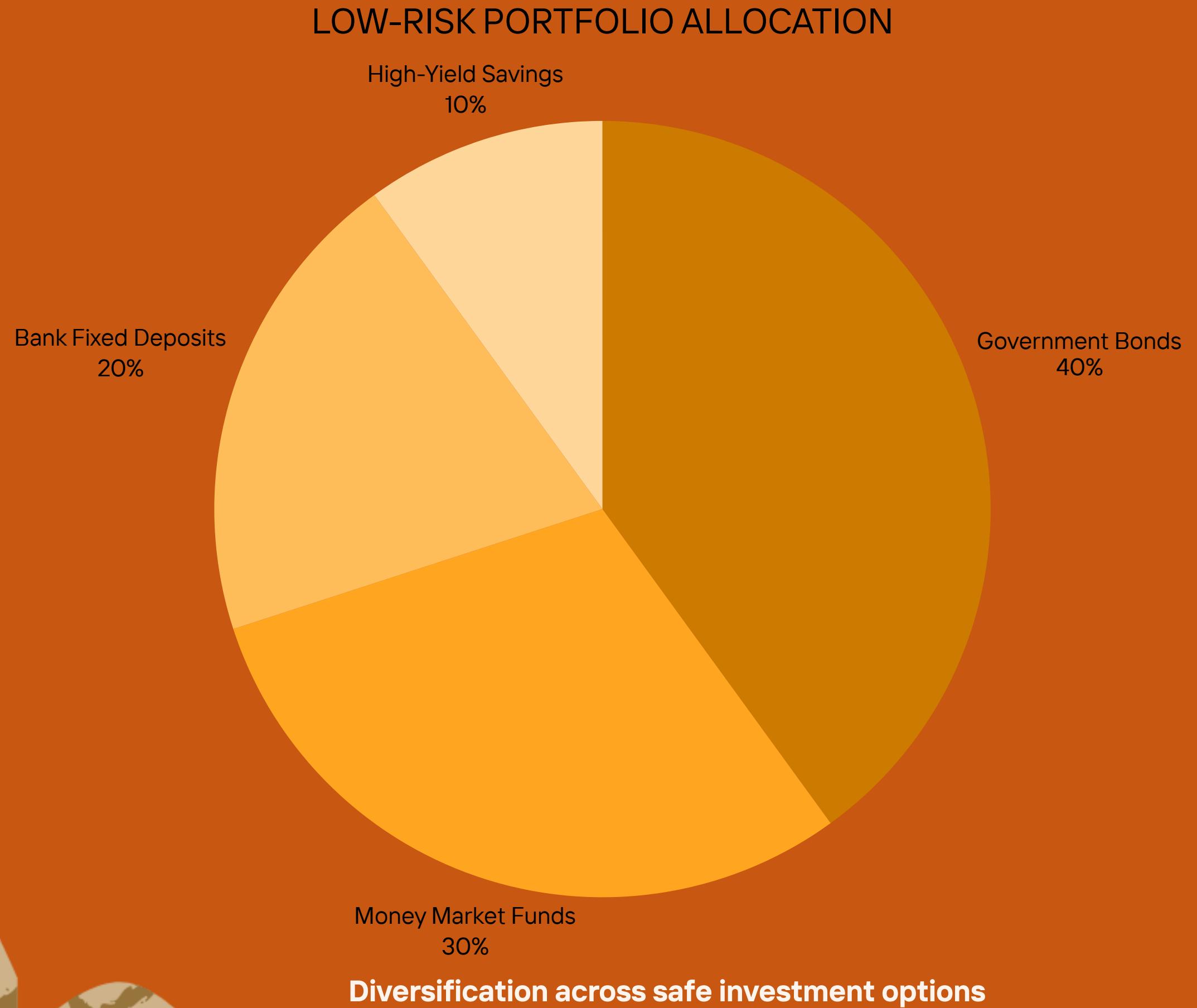


Unit Trusts

Diversified investments offering **moderate risk** and steady growth potential.

Low-Risk Portfolio Allocation Breakdown

This chart illustrates the **key investment segments** in a low-risk portfolio, showing how Bonds, Money Market, Deposits, and Savings contribute to overall stability and returns.





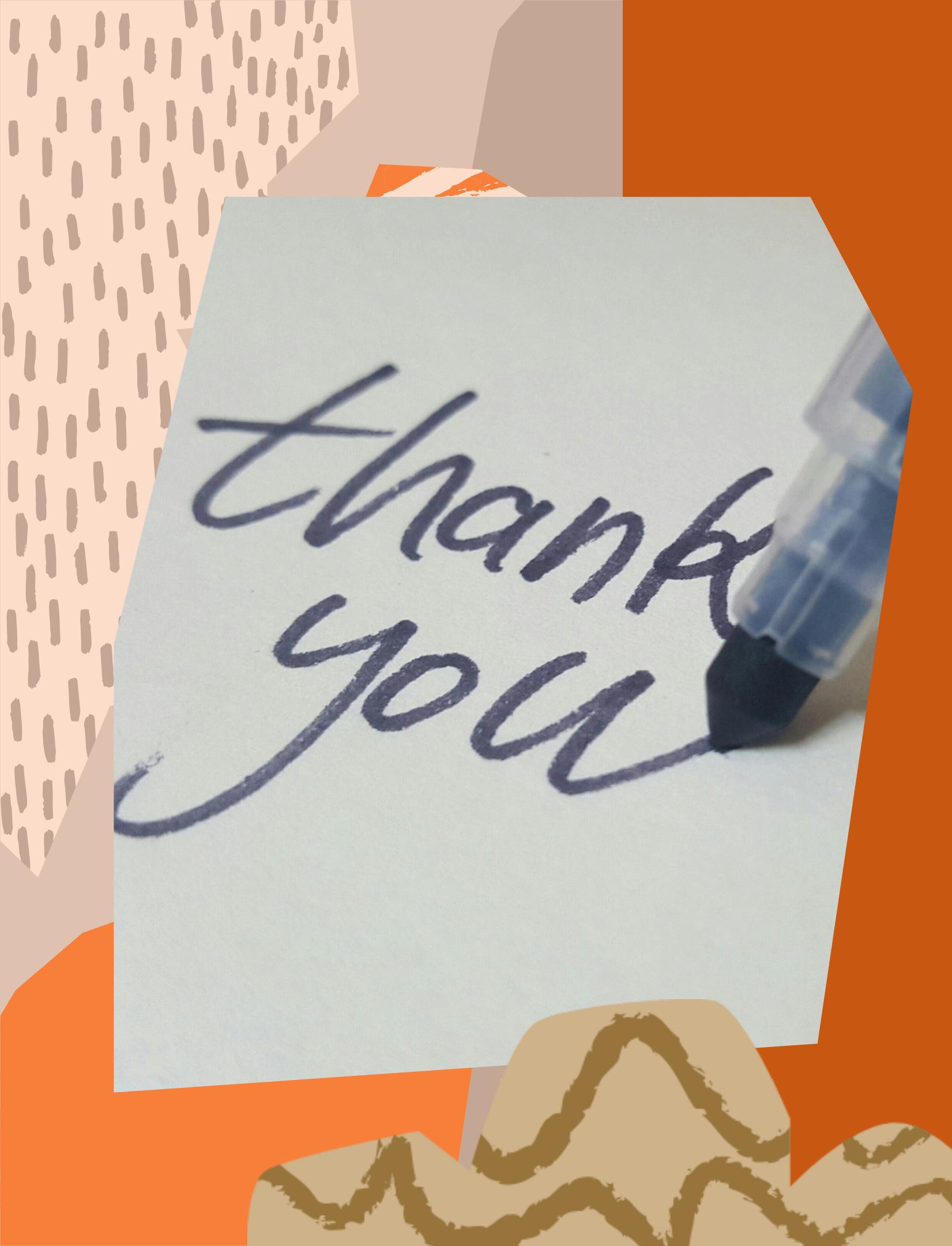
Impact and Benefits

- Increases access to affordable, professional investment advice.
- Promotes informed financial decisions.
- Cultivating a savings and investment culture
- Supports national economic growth

Next Steps for Implementation

Key actions to drive our success

- Deployment strategy for the platform
- Integration with existing systems
- Continuous model improvement and updates
- Outreach initiatives to raise awareness
- User feedback for enhancement

A photograph of a white piece of paper with the words "thank you" written in blue ink in a cursive, handwritten style. A blue pen is resting on the paper, pointing towards the bottom right. The background behind the paper is a textured, light brown surface.

Contact us for more information today!

Group 4

Faith Karimi

Ronny Muthomi

Mohammed Abdi

Austin Mwasi

Mercy Kang'ethe

Email

faith.karimi@student.moringaschool.com

ronny.muthomi@student.moringaschool.com

GitHub

https://github.com/KarimzKarimz/Group4_Capstone_Final_Project