

# Smartphone Financing – Credit Scoring Model Design

## Credit Scoring for whitelisting customers

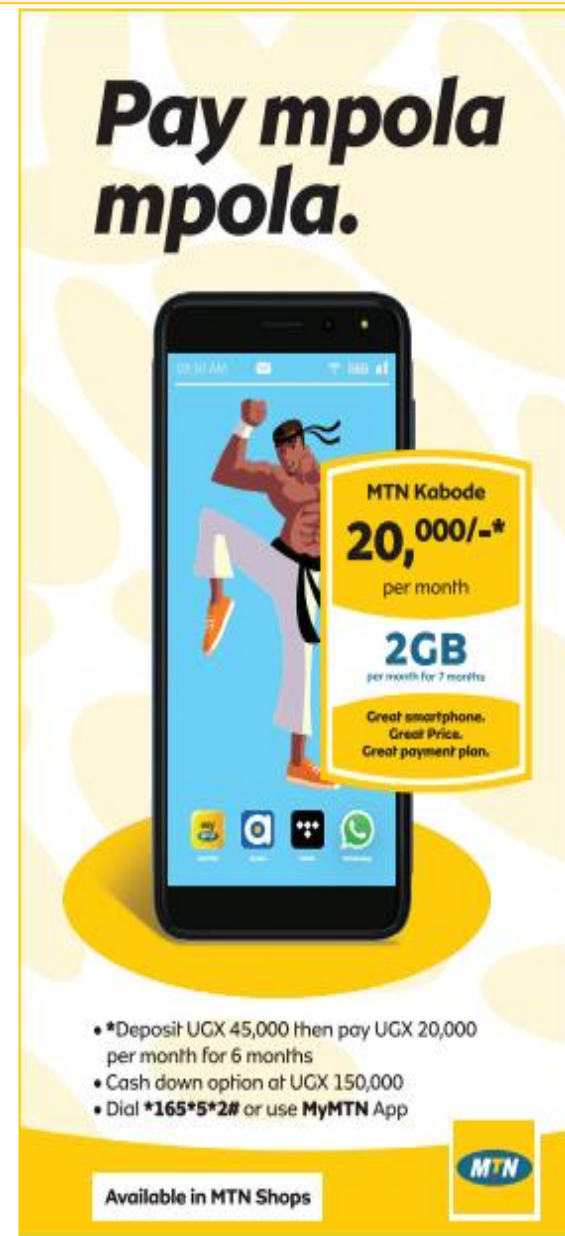
- Exploratory Data Analysis – EDA (Python)
- Feature Engineering Dimensionality reduction (PCA)
- Self supervised: Customer segmentation (KMeans, SOMs, t-SNE)
- Supervised machine learning: Classification (Light GBM, Random Forest, SVM)
- Credit score mapping, limit calibration and assignment

## Technologies and languages used

- Model design (Python, Scala, Go Lang)
- Deployment On-premise: (Kubernetes, Play framework, Akka – Actor model, Kafka, Redis, MongoDB)

## Target Base

- Qualified/Target Base – (~65% whitelisted)
- Control group - (~7% from active base)



**Pay mpola mpola.**

MTN Kabode  
**20,000/-\***  
per month  
**2GB**  
per month for 7 months  
Great smartphone.  
Great Price.  
Great payment plan.

• \*Deposit UGX 45,000 then pay UGX 20,000 per month for 6 months  
• Cash down option at UGX 150,000  
• Dial \*165\*5\*2# or use MyMTN App

Available in MTN Shops

MTN

The advertisement features a smartphone displaying a cartoon character in a dynamic pose. A yellow callout box highlights the financing offer. The background is a light yellow with abstract shapes. The MTN logo is in the bottom right corner.

**Thank you!**