Predicting Barriers to Financial Inclusion Among Rural Youth in Kenya

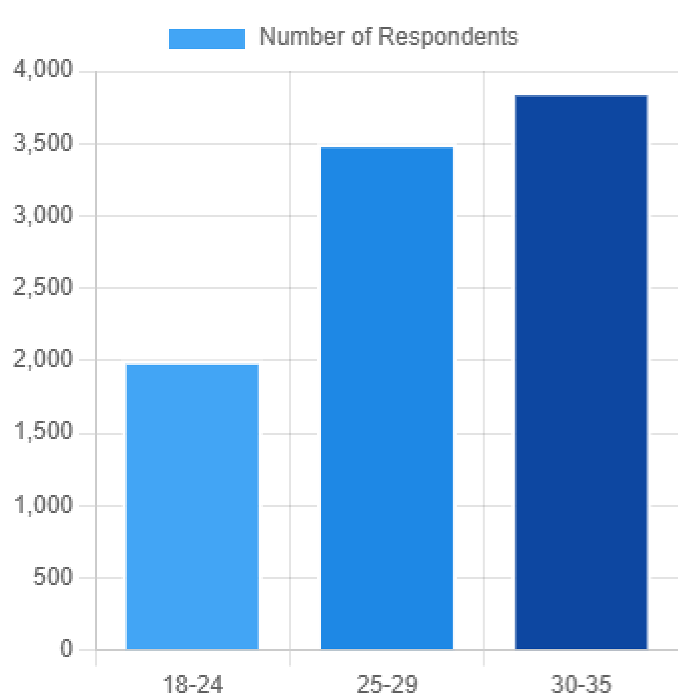
The Challenge of Financial Exclusion

The FinAccess 2024 Household Survey highlights a complex financial landscape in Kenya. While the nation has made significant strides in financial inclusion, disparities persist. Rural youth, aged 18-35, remain a key demographic facing disproportionate exclusion. This analysis leverages the FinAccess dataset to uncover the demographic, technological, and economic barriers they face, providing data-driven insights to inform policy and future interventions.

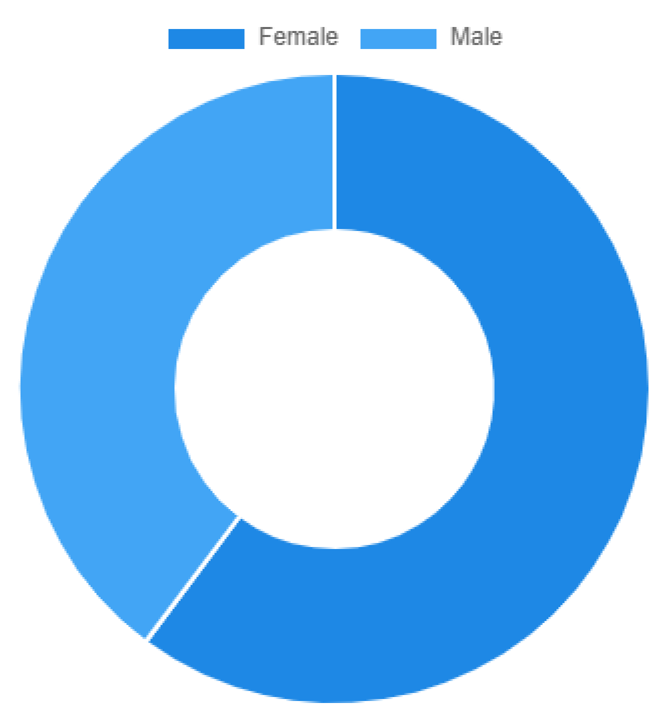
Understanding the Respondents

A deep dive into the demographics of the survey respondents reveals the foundational characteristics of the population studied. Understanding their age, gender, and geographic distribution is the first step in identifying the nuanced barriers to financial inclusion.

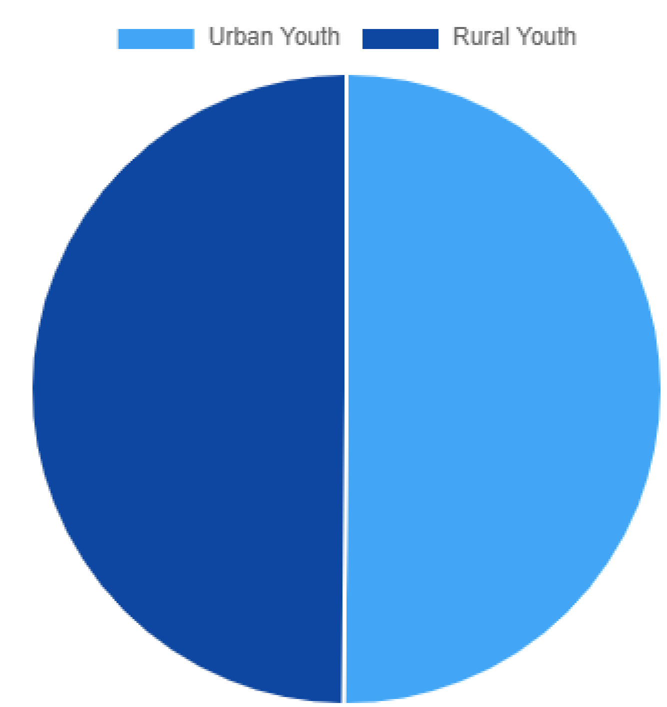
Age Distribution of Youth



Gender Distribution



Settlement Type



The study focuses on youth aged 18-35. The data shows a significant concentration of respondents between 25 and 35, with the peak at age 30, indicating a mature youth demographic engaging with financial services.

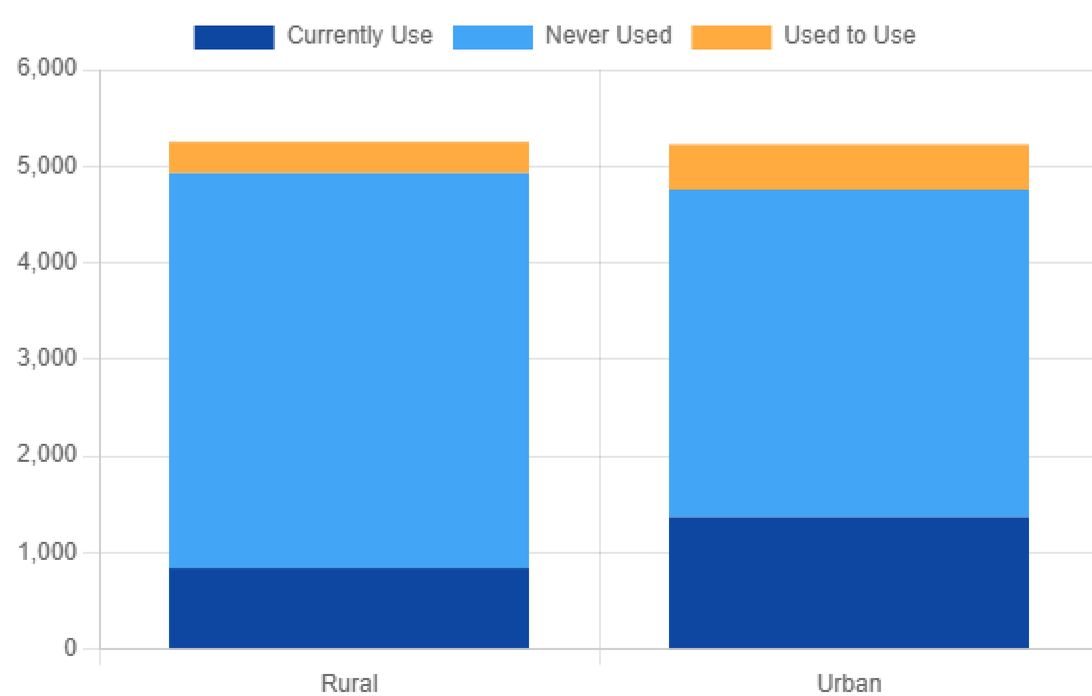
There are more female (60%) than male (40%) respondents in the survey. This could reflect higher female participation or the underlying population structure, a key factor for gender-focused policies.

The dataset is well-balanced between urban and rural youth. This split is crucial for comparing trends in digital access, income, and financial behavior by location.

The Financial Landscape

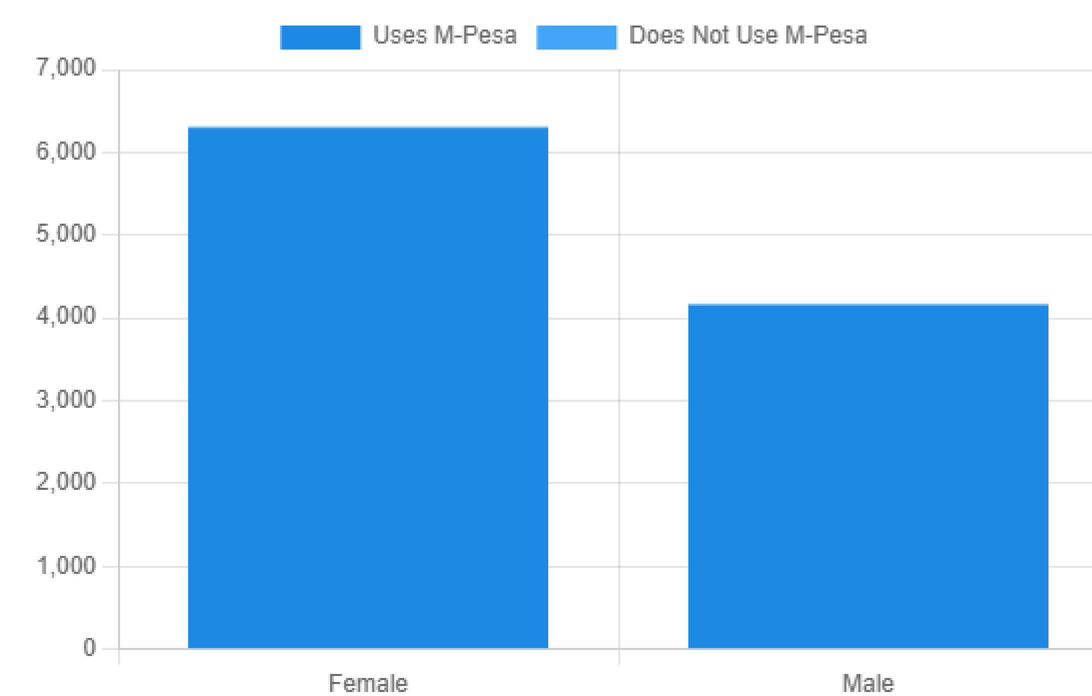
Examining how youth interact with financial services reveals critical patterns. From the dominance of mobile money to the slow adoption of formal banking, these trends highlight both opportunities and challenges.

Formal Bank vs. Microfinance Account Access



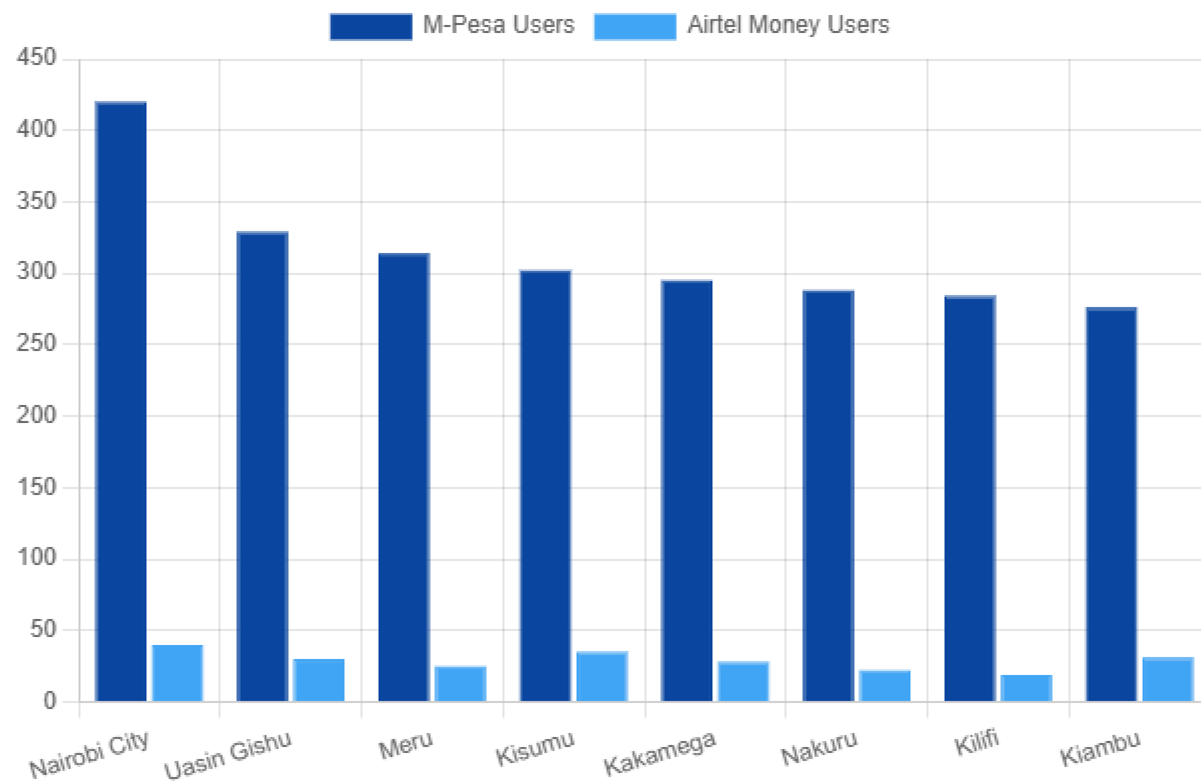
A significant portion of youth in both rural and urban areas has never used a formal bank or microfinance account. This gap is more pronounced in rural areas, signaling a major barrier to deeper financial inclusion.

M-Pesa Usage by Gender



Mobile money, particularly M-Pesa, is nearly universal among respondents. More females report using M-Pesa than males, highlighting its critical role as a primary financial tool for women.

Mobile Money Landscape Across Top Counties



M-Pesa dominates the mobile money market across all counties, with urban centers like Nairobi City and Kisumu showing the highest number of users. The presence of Airtel Money, though minor, indicates some market competition.

Economic Realities and Digital Readiness

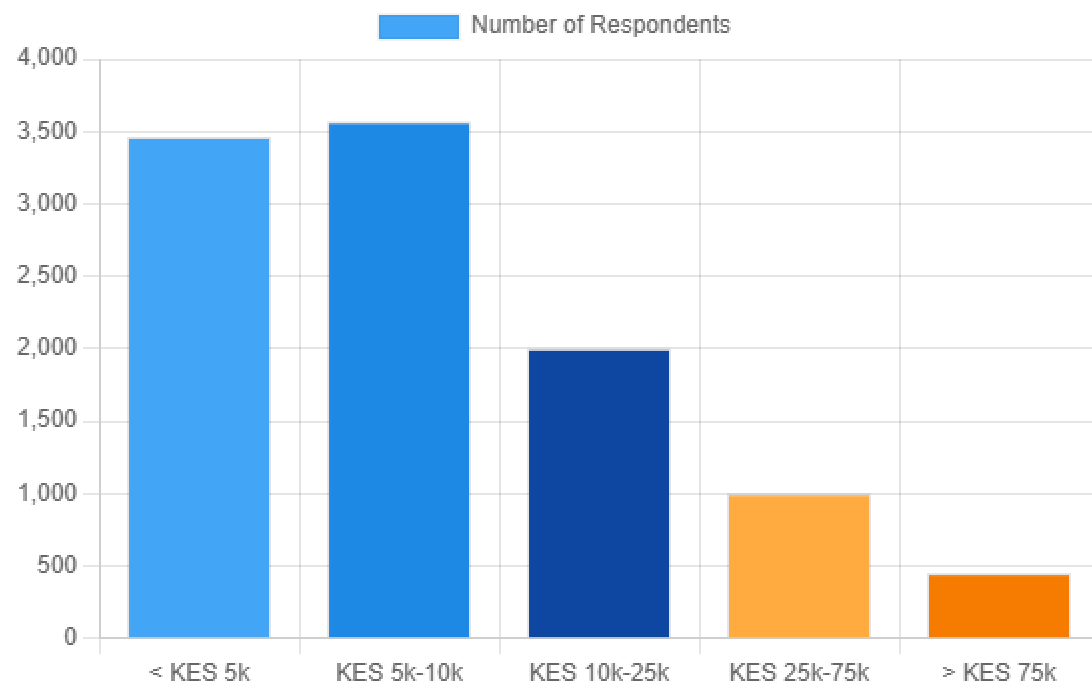
Economic status and digital capability are intertwined. High mobile penetration provides a foundation for digital services, but employment status and income levels dictate the ability to save, invest, and build financial resilience.

~18%
Self-Employed

~90%
Digitally Ready (Phone & ID)

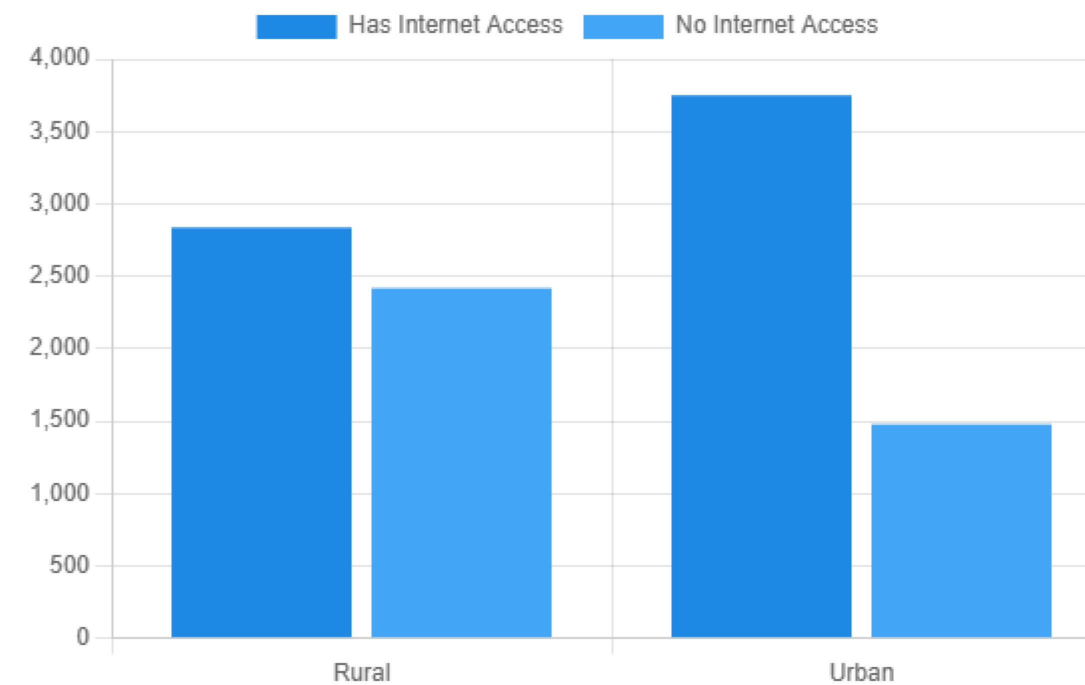
85%
Felt KES 500 Buys Less YoY

Monthly Expenditure Distribution



Monthly spending varies widely, with the majority of youth spending under KES 75,000. This indicates diverse economic capacities, requiring segmented financial products and services.

Internet Access by Settlement Type



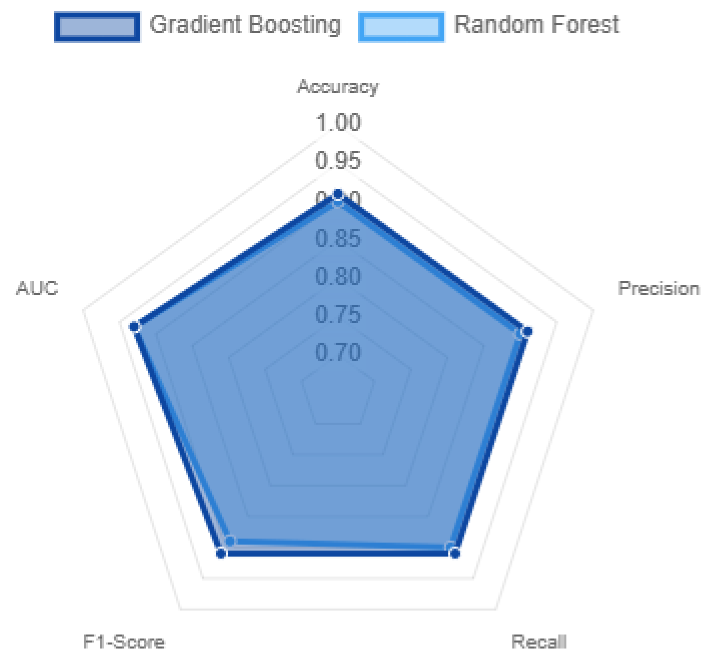
Internet access is significantly higher in urban areas. This digital divide is a critical barrier, limiting access to online financial services and information for rural youth.

Predictive Modeling: Identifying Key Barriers

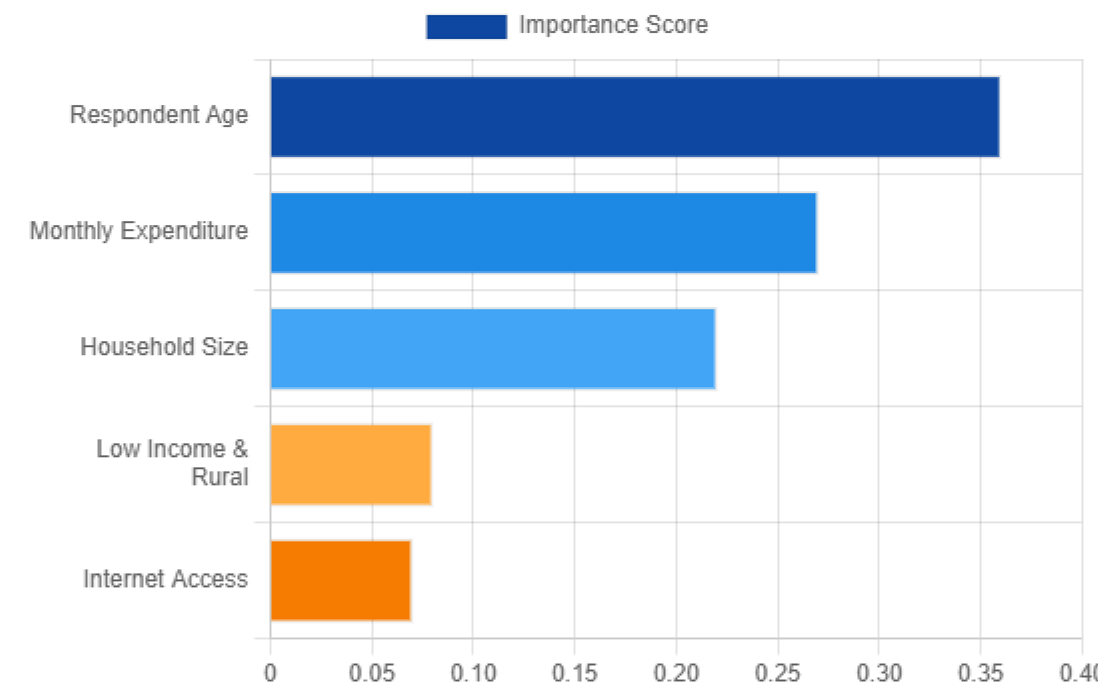
To identify the most significant factors driving financial exclusion, several machine learning models were tested. The goal was to build a model that could accurately predict an individual's financial status based on their demographic and economic characteristics. After extensive testing, Gradient Boosting emerged as the top-performing model.

Top Performing Model: Gradient Boosting

Key Predictive Features (Feature Importance)



Gradient Boosting achieved the highest performance with 91% accuracy and a balanced F1-Score of 0.91, proving highly effective at identifying both included and excluded individuals.



The model revealed that a youth's age, monthly expenditure, and household size are the most powerful predictors of their financial inclusion status. These factors outweigh others like education level or internet access in the model's decision-making process.

Conclusion & Way Forward

This analysis confirms that while Kenya has made great strides in financial inclusion, significant barriers remain for rural youth. High mobile penetration, driven by M-Pesa, serves as a crucial foundation, yet it doesn't automatically translate to deeper engagement with formal financial services like banking or SACCOs.

Key Takeaways:

- **Mobile is Key, but Not Enough:** Nearly all youth are on mobile money, but a large portion remain unbanked, especially in rural areas.
- **Economic Factors Dominate:** Age, monthly expenditure, and household size are the strongest predictors of financial behavior, highlighting the importance of income and life stage.
- **A Digital and Economic Divide Persists:** Rural youth have less internet access and lower average expenditures, creating a dual barrier to digital financial services.

Policy Implications:

- **Bridge the Gap:** Develop policies and products that bridge the gap from mobile money to formal banking, such as simplified bank account opening processes via mobile.

- **Targeted Interventions:** Create tailored financial literacy programs and products for different youth segments based on income level, location (rural/urban), and employment status.
- **Leverage High Mobile Penetration:** Continue to use mobile platforms for delivering financial education, job-matching services, and accessible credit products like the Hustler Fund.