

iGENUITY™

Securing Mobile Money

Transactions for a Mobile Operator

The integrity of mobile money transactions is not just a regulatory requirement but a cornerstone of operational success



Background

Africa has become a hub for mobile money. More adults have mobile money accounts than bank accounts.

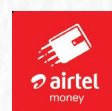
Driven by improved access to technology and local challenges in accessing traditional financial services, mobile money continues to experience rapid growth.

An Evolving Transaction Landscape

Initially designed for remittances, mobile money services have expanded to enable a variety of transactions from paying bills to purchasing airline tickets.

This evolution has not only equalised access to financial services but has also enhanced the safety of transactions, particularly in rural areas where cash payments can be risky.

The key players are Vodafone, Orange, MTN, and Airtel



Security Concerns around Mobile Payments

Despite the maturity of many mobile money systems, the speed at which they are rolled out often leaves security measures inadequately addressed.

The rapid increase in transaction volumes has created the need for more secure transaction environment. System integrity is essential.

Case Study

An African mobile operator approached Xintec in early 2024, outlining their security challenges. They needed to make their transaction environment safer, more reliable, and more efficient.

The fast-paced growth of their mobile money service had meant prioritising speed over security, leading to overlooked fraud risks and vulnerabilities.

Inherent weaknesses in their system led to errors, leakages, and fraud.

After carefully analysing the problem, we recommended the Mobile Money module of our iGenuity Fraud Management and Revenue Assurance System. This module comprises a dedicated set of automated controls, some of which are based on AI.

The Solution: Automating Security Checks

The Xintec iGenuity tool is a solution that automates the controls that had hitherto been performed manually, often through Excel sheets. These manual controls were usually infrequent and are carried out on sample data (as opposed to entire data sets) due to the operator's resource and time constraints.

Regulatory requirements in force in the country dictated that these controls should be conducted at regular intervals and on the entirety of the data, underscoring the urgent need for a solution.

By implementing iGenuity, this operator will have achieved an over 50% reduction in time and material costs in securing their mobile money platform, and can now allocate resources more efficiently to other critical areas of their business.

How the iGenuity Mobile Money Solution Works

Revenue Assurance

iGenuity generates comprehensive reports on transactions, monitoring the integrity of payment processes, money transfers, commissions, service charges, and taxation.

It identifies even minor discrepancies to ensure that all revenues for the mobile network operator are accounted for correctly.

Fraud Prevention

The tool performs velocity checks to validate transactions, analysing user behaviour around SIM swaps and PIN resets to detect anomalies.

It identifies suspicious activity, such as large deposits not converting into smaller withdrawals, which could indicate fraud.

Subscriber Monitoring

iGenuity monitors new subscribers during the sign-on process, filtering out applicants who do not meet registration criteria or have prior insolvency records.

It also monitors black/restriction lists to avoid barred subscribers from attempting to re-open new accounts.

The tool also tracks trends in the abuse of mobile money services, helping operators to reduce fraud and improve their bottom line.

iGenuity advantages

- Easy-to-implement controls designed to prevent fraud and protect consumers
- Compliance with legal and regulatory requirements, both local and international
- Accounting transparency for accurate reporting based on reliable transaction data
- Adherence to applicable internal and external auditing standards
- Risk mitigation by eliminating errors and promoting a healthy transaction environment

Conclusion

Mobile money in Africa has made remarkable strides in financial inclusion and transaction safety, but it faces significant challenges related to security and fraud.

"The implementation of automated controls with tools like Xintec iGenuity is essential to addressing these vulnerabilities, Upholding the integrity of mobile money services and safeguarding network operators revenues."

As the landscape continues to evolve, prioritising security will be critical to sustaining growth and fostering trust among users.