

**Researchers**

Matthew Bird  
Universidad del Pacífico

Rafe Mazer  
Fair Finance Consulting

**Staff**

Anthony Kamwesigye  
Associate Research Manager

**Timeline**

2023

**Study Status**

In Progress

**Study Type**

Randomized Evaluation

**Sample Size**

27,000 digital financial services users

# Can Interactive Mobile Phone Games Help Consumers Detect and Prevent Fraud in Uganda?

**Researchers in Uganda partnered with Viamo to evaluate the impact of choose-your-own-adventure games delivered via Interactive Voice Recording (IVR) on fraud prevention capability, incidences of fraud, and reporting of fraud incidences among digital financial services users.**

Although digital financial services (DFS) have enabled greater financial inclusion around the world, it has also increased the threat of loss from fraud. These financial scams may lead to both individual and social welfare loss and hinder further take-up and usage of DFS. Fraud issues are acute for consumers in Sub-Saharan Africa, especially in Uganda, where a nationally representative phone survey found that 47 percent of users experienced a third-party fraud attempt via phone or SMS between March and September 2020, with even higher rates when including fraud or fee overcharge from agents.<sup>1</sup>

Users who encounter or experience fraud can seek consumer redress with their providers, but these channels are often slow and only occur after the event has happened. In turn, many Ugandans who failed to resolve complaints through complaint channels were more likely to stop or reduce usage compared to those who resolved their complaints. While regulators and government agencies across contexts have used machine learning and other innovations to monitor fraud and complaints, evidence on their effectiveness is mixed, particularly for targeting fraud and forewarning customers. However, research suggests that consumer-side interventions such as financial education—whether delivered in person or over

radio and television or via tablets—have significant positive effects on fraud literacy and future behavior when making transactions. Can mobile phones deliver effective fraud prevention communications?

Researchers partnered with IPA and Viamo Uganda to evaluate the impact and scalability potential of choose-your-own-adventure games delivered via Interactive Voice Recording (IVR) on fraud prevention capability, incidences of fraud, and reporting of fraud incidences among consumers. Participants called into an existing information platform and played a narrative game. During this game, researchers examined how participants decided to recognize and respond to possible fraud attempts, earning points and unlocking levels as they progressed. Key messages on fraud were highlighted via heuristics, metaphors, or proverbs to make the content memorable and actionable for participants. Upon unlocking and completing all levels, participants received a financial reward.

A total of 27,000 DFS users were randomly assigned to either play the narrative IVR game or serve as a comparison group. Among the users who played the narrative game, researchers randomly assigned them to either receive reinforcement messages or no messages. Researchers measured users' fraud victimization and fraud prevention capability one month and seven months after the intervention. They also collected administrative data to compare use of fraud reporting and SIM verification tools.

Results will be available in 2024.

## Sources

<sup>1</sup> Mazer, R. & Bird, M. (2021). Consumer Protection Survey of Digital Finance Users: Uganda", <https://doi.org/10.7910/DVN/ROLCU4>, Harvard Dataverse, V1

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## Implementing Partner



**Viamo**