

Empirical Evidence from Uganda on the Impact of Mobile Money on Rural Households

Recent studies have shown that over 70% of Ugandans own a mobile phone, with a lower penetration in rural areas (around 65%). This study however focuses on rural Northern Uganda, which is more underserved, with only 27.6% of households possessing a mobile phone. In addition, MTN is the most popular service provider where it has almost become a monopoly, especially in rural areas. This is why, in the framework of the program studied, IFC collaborated with Airtel Money: to increase competition (meaning lower prices), and to increase the penetration of mobile money in rural communities.

The areas included in the study have “high poverty rates, as well as low access to financial services, with a median distance to a bank branch being 25.2 km.” The study aims to analyze whether introducing mobile money agents can affect accessibility and the households’ financial behavior and to understand if these areas are *simply* “too remote and too poor to benefit from mobile money, or if mobile money would increase savings and remittance receipts.” (World Bank, 2019).

Quick facts

Barriers addressed



Digital & Physical Infrastructure

Distance from financial service points

Segment focus

1 2 3 4

Geography

[Uganda >](#)

Sources

[GSMA, 2019](#); [World Bank, 2019](#).

Customer Journey Relevance



Key stakeholders involved

Airtel
IFC – Mastercard Foundation
Partnership for Financial Inclusion

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Key activities

The International Finance Corporation (IFC) collaborated with Airtel Uganda in the aims of measuring the impact in a field experiment of mobile money in poor, remote areas in Northern Uganda where “334 clusters of enumeration areas were assigned to a treatment or a control group, stratified by distance to a bank branch.” In 46% of the clusters (in the treatment groups) at least one Airtel Money agent was deployed.

- Rollout of 370 Airtel Money agents—who were identified by a professional services firm that also provided with equipment, training and marketing materials—in treatment clusters between January and June 2017.

Outcomes/results

To correctly identify the impact of mobile financial services, the study used the SWIFT approach – a rapid poverty assessment tool which compares data on households in the treatment group to typical consumption, income, welfare.

The agent rollout increased mobile money usage in the treatment group by 4.2% in clusters that were far from bank branches. There was no statistically significant impact on clusters that were near bank branches. This suggests that there is demand for mobile money in remote areas if services are made available.

The effects on receiving or sending money via mobile money (as opposed to other channels, such as hand carrying the money) are positive for clusters far from a bank branch, but they are not statistically significant.

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Furthermore, the agent rollout increased the probability of not having to pay transportation cost for receiving money by 13%, even though this did not translate into increased frequency of receiving or sending money.

Key enabling environment factors for the intervention

Mobile money and other Digital Financial Services have gained popularity and acceptance in Uganda, especially due to its usage in sending remittances.

Another enabling factor was the willingness of various stakeholders to engage in partnerships targeting financial inclusion:

- The government's commitment to the issue highlighted by the Uganda National Financial Inclusion Strategy 2017-2022
- Airtel has gained visibility and legitimacy from IOs like UNCDF, which has supported similar projects

Key design elements and principles that led to successful outcomes

Airtel Money relied on an external professional services firm to identify potential agents. This firm already had a detailed database of businesses that could be approached based on information about the number of employees, type of business, annual turnover, proximity to closest bank branch, and business used mobile money before. This saved a lot of time and effort from Airtel's side, especially as the firm also helped with the logistics of recruitment and training as well as provision of marketing materials.

Potential for scale/replicability

In countries where mobile money is a prevalent means of financial service, agents have a crucial role in accessing underserved populations; in fact, in over 80% of these markets, agent outlets outnumber bank branches. Agents are cost effective and overall efficient in reaching rural populations (GSMA 2019).

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Challenges encountered during the program

As the program was implemented a couple of years before the study was conducted, the authors couldn't effectively measure long-term impacts of the agents rollout, and thus observed no impact of higher financial inclusion on poverty levels.

The data used to determine the impact of the program was not always straightforward; to measure the change in transactions, the authors obtained data from Airtel, which they had difficulty mapping to the clusters identified previously. The transactions were associated with a phone number, yet there was no information on the owner's identity and their location, which could only be approximated by the location of the cell phone tower used. This could have tampered with the results, so they tracked the phone numbers given by participants in the surveys.

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