# **Increasing the Use of Mobile Banking**



Behavioral Text Message Campaigns in Nigeria

Access and use of formal financial products can help people better manage unexpected expenses or loss of income, improving their overall financial stability. Online and mobile platforms enable more low-income and unbanked populations to access financial services—but the technology does not automatically translate to the active use of these products that makes them worthwhile, and billions of people remain underbanked. By applying behavioral insights to digital financial products and services, financial service providers can help more people not only access but also actively use beneficial tools to manage their money.

#### Summary .....

With advancements in mobile technology and internet access over the past several years, there has been a parallel surge in the development of digital financial services (DFS), including mobile money applications that allow customers to make deposits and payments without visiting a bank branch. The wider reach of DFS can help people who otherwise may not have been able to access financial services accumulate savings securely and better manage financial risk. As such, this technology has allowed financial service providers such as banks, microfinance institutions (MFIs), and mobile network operators (MNOs) reach traditionally underbanked and low-income populations.

## Highlights

- Digital financial services help underbanked and low-income populations securely save and manage financial risk.
- Features for users on mobile platforms are not always salient, leading to low uptake.
- Behaviorally framed text messages can be a viable tool for driving small changes in the use of helpful digital financial services.

However, technology alone is not a silver bullet for disparity in financial health. An estimated 1.7 billion people still don't own banking products and services. And about 20% that do have bank accounts do not actively use them<sup>1</sup>, and thus don't reap the benefits to their finances.

We examined this problem closer in Nigeria, where the uptake of DFS has been low compared to other countries in sub-Saharan Africa, even decreasing in the recent years. The 2014 Global Findex indicated 49% of adults over the age of 25 reported having an account; however, in 2017 only 44% reported account ownership. Account owners in Nigeria are primarily middle- and higher-income consumers, and they are more likely to be men (51% of men use DFS compared to 27% of women).<sup>2</sup>

ideas42 and Busara Center for Behavioral Economics worked with a major bank and an MNO in Nigeria to develop and test a series of behaviorally informed text message interventions on a mobile bank account launched by the two institutions. The text messages were designed to help more people actively use the digital product account, which had high account dormancy, in order to support their financial management and improve financial health.

<sup>&</sup>lt;sup>1</sup> Demirguïc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess. 2018. The Global Findex Database 2017: Measuring Financial Inclusion and the Fin- tech Revolution. Washington, DC: World Bank. doi:10.1596/978-1-4648-1259-0. ² ibid



## Perceptions of mobile accounts .....

To understand the barriers to opening and using the mobile bank account, we conducted interviews with clients and potential clients in both urban and rural areas of southwest and north central Nigeria. We also examined data provided by our partners. We uncovered several insights through qualitative and quantitative research. The three interventions we conducted focused on addressing the following behavioral bottlenecks preventing people from opening accounts and making deposits:

- Customers primarily used the mobile banking product as a vehicle for buying call credits (i.e., airtime)—as opposed to seeing it as a mechanism for accumulating savings;
- 2. Customers did not trust the product and did not observe many of their peers using it; and,
- **3.** While it was relatively easy to open an account, limited orientation for new customers meant the features of the mobile bank account (such as the ability to make bill payments and conduct transfers between other accounts) were not salient.

### Text messages to boost adoption and use

With these insights in mind, we designed text message interventions to help overcome behavioral barriers to opening and using the mobile bank accounts.

**Round 1: Increase deposits:** The first intervention was an SMS campaign around injunctive norms (i.e., what one ought to do) and *descriptive norms* (i.e., what others are doing) to increase deposits into the mobile bank accounts (both active and inactive accounts), which are key for savings and can facilitate other transactional behaviors on the mobile account. The total sample size was 75,000 customers. There were 14 treatment groups (customers who received messages) and one control group (customers who received no messages) with 2,500 customers in each group. Two sets of messages were sent to the treatment groups over one week.

**Round 2: Increase engagement in a referral and lottery campaign:** The second intervention was designed to prompt users to refer their friends to the mobile bank account. We designed a referral and lottery campaign launched by the bank and the MNO. Three sets of messages (i.e., standard message, regret aversion message, and loss aversion message) were sent to promote campaign engagement and referrals. We tested two rounds of the messaging campaign. The **standard message** sent customers general messages alerting them about the campaign. The **loss aversion message** informed customers that they would lose their opportunity to claim the lottery prize if they didn't refer friends, which aimed to elicit the powerful desire to avoid losses and prompt customers to make referrals. The desire to avoid a loss can often have twice the motivational force as the desire to gain something of equivalent value. The **regret aversion message** aimed to drive referrals from non-winners in the second round of the campaign when the regret is more tangible. The messages highlighted to customers that they could have won cash prizes but failed to refer enough friends, in an attempt to elicit a fear of regret. The test sample was divided into three treatment groups that each received one of the three types of messages, and there was a control group. Each group had 20,000 customers with a total sample size of 80,000. The messages were delivered over the course of 12 weeks.



#### Results

We tested each of these messaging interventions by running randomized A/B tests across different customer segments.

**Round 1:** The effects of the text message campaigns on deposits varied by message and audience. Notably, injunctive norm messages (what one ought to do) led to a 45% increase in the number of clients making deposits among women with active accounts, from 0.82% to 1.81%. Significant, but very small magnitude changes in deposits, payments, and transfers, were also found among inactive women customers. There were no noticeable differences in behavior among men's active or inactive accounts compared to the control group.

**Round 2:** In the referral and lottery campaign tests, receiving text messages prompted more customers to opt-in to participate and refer peers to open accounts compared to the control group (customers that only received broader marketing materials such as radio announcements). Messages with a loss aversion frame were most effective, leading to a 3.07 percentage point increase in participation and 0.31 percentage point increase in referrals, which represents a 35% and 39% increase respectively compared to the control group.

### Insights for the future

The results from the first and second intervention suggest that behaviorally framed text messages can be a viable tool for driving small changes in the use of, and engagement with, helpful digital financial services. Mirroring past studies, we found that this impact was largely centered around female customers. Increasingly, messaging is seen as a convenient and low-cost channel for financial service providers to reach underbanked customers who are otherwise difficult to contact. Our broader set of projects around these types of messaging campaigns sough to understand whether tailored messages to consumers could drive behavior change and benefit customers' financial health and providers' sustainability. In this set of tests and others, it is important to test which messages create real and positive effects on behavior and identify which populations are responsive to different messages, to help optimize strategy around targeted outreach.

Innovating with different behaviorally informed messages and experimenting with communications channels can produce new insights about effective methods to improve ownership and active use of digital financial products and services. These insights should inform future work in this area and can be adapted for other contexts in which mobile bank accounts are not fully utilized—paving the way to better financial health for more people around the globe.