Improving digital loan repayment behaviors of small businesses

Sector
Financial inclusion and technology (Mobile Money)

Project Type
Field experiment

Sample Size
102,841 participants

Behavioral Themes
Loss aversion, progress tracking, social norms, complacency bias

Photo credit: Amy Blue
Context

How can we improve digital loan repayment rates through behavioral science?

The Government Enterprise and Empowerment Program (GEEP) is an SME micro credit program housed under Nigeria’s National Social Investment Office (NSIO). GEEP’s primary program activities involve extending interest-free loans to traders, artisans and farmers in an attempt to boost their businesses. The goal of the program is both to provide low-cost credit to budding entrepreneurs and to support their transition to digital financial services and improved financial inclusion.

A behavioral science approach

The decision to repay a loan is often subject to both a consumer’s ability, but more importantly, willingness to pay. That willingness is naturally subject to a number of competing priorities, many of which are subject to behavioral barriers. Uncertainty about the consequences, lack of salience of the repayment terms, or unclear links to their perception of self can all inhibit timely repayment.

Fortunately, evidence has shown that small changes such as conveying a sense of social rank, visualizing clear plans and goals, and automating deductions can create an easy avenue to help customers avoid costly fees associated with late or nonpayment. In this project, Busara was commissioned to design a set of behavioral interventions that would improve the likelihood that borrowers repay their digital loans on time.
Design Intervention
Leveraging of ‘social comparisons’ by communicating repayment performance relative to other beneficiaries, based on a color scale (Yellow, Orange, Red and Black for very poor relative repayment performance).

Theory of Change
People tend to aspire to being associated with positive social identities. Ranking beneficiaries based on their repayment performance can improve repayment behavior in the hopes of obtaining a better repayment rank.

This is how we calculate your BVN colors
- **Yellow**: 4 to 8 missed payments
- **Orange**: 8 to 12 missed payments
- **Red**: 12 to 24 missed payments
- **Black**: 6 months passed and still in debt

Dear XXXX,
Warning. Your BVN color is **YELLOW**. As of 8th May 2018 you owe XXX amount out of the XXX expected so far. Pay at least XXX due by 22nd May 2018 to get out of yellow and avoid Orange. Otherwise, your BVN may be blocked may be blocked after this point.

Questions: Our new helpdesk 070 XXXXXX.

**4 <= Weeks in defaults < 8**

Dear XXXX,
Warning. Your BVN color is **ORANGE**. As of 8th May 2018 you owe XXX amount out of the XXX expected so far. Pay at least XXX due by 22nd May 2018 to get out of Orange and avoid Red. Otherwise, your BVN may be blocked may be blocked after this point.

Questions: Our new helpdesk 070 XXXXXX.

**8 <= Weeks in defaults < 12**

Dear XXXX,
Warning. Your BVN color is **RED**. As of 8th May 2018 you owe XXX amount out of the XXX expected so far. Pay at least XXX due by 22nd May 2018 to get out of Red and avoid Black. Otherwise, your BVN may be blocked may be blocked after this point.

Questions: Our new helpdesk 070 XXXXXX.

**12 <= Weeks in defaults < 24**

Dear XXXX,
Warning. Your BVN color is **BLACK**. As of 8th May 2018 you owe XXX amount out of the XXX expected so far. Pay at least XXX due by 22nd May 2018 to avoid Black. Otherwise, your BVN will be BLOCKED and you will not be able to use any bank account after this point.

Questions: Our new helpdesk 070 XXXXXX.
Results

We find that all groups, apart from those blacklisted, have a positive impact, but the orange group worked markedly better than the others. We believe this has to do with the signaling ability of “orange” in communicating that you are both (a) trending towards a dangerous path and (b) still have some capacity to recover.

We believe the best way to scale this would be by broadening the categories for orange, so that a larger set of the population is exposed to the intervention and is encouraged to take action towards the repayment of digital loans.
Discussion and areas for further exploration

The “Goldilocks” principle

It appears that the “Orange” messages had the strongest impact on repayment rates. This suggests that the actionability and urgency of the message is critical to the response. For customers in the red or black category, while the stigma of being in those categories may have motivated some form of response, it was far less important than the fear of becoming red induced in the orange group. Similarly, for yellow respondents, their label may have given them a false sense of confidence in their repayment status (similar to the negative boomerang effect on power consumption with Opower - (Alcott, 2011)). Our read is that any update to a user’s status of where they sit among their peers needs to be sufficiently motivating, but still actionable (“just right”).