



## Responsible Digital Finance

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# Seven Key Concerns of Digital Financial Services (DFS) Customers



Source: CGAP

1. Inability to transact due to network/service downtime
2. Inability to transact due to insufficient agent liquidity/float
3. Complex and confusing user interface
4. Inadequate provider recourse
5. Lack of transparency
6. Fraud perpetrated on the customer
7. Inadequate data privacy and protection

# Transparency and Digital Credit

# Example 1: Poor disclosure of costs and easy access to key terms

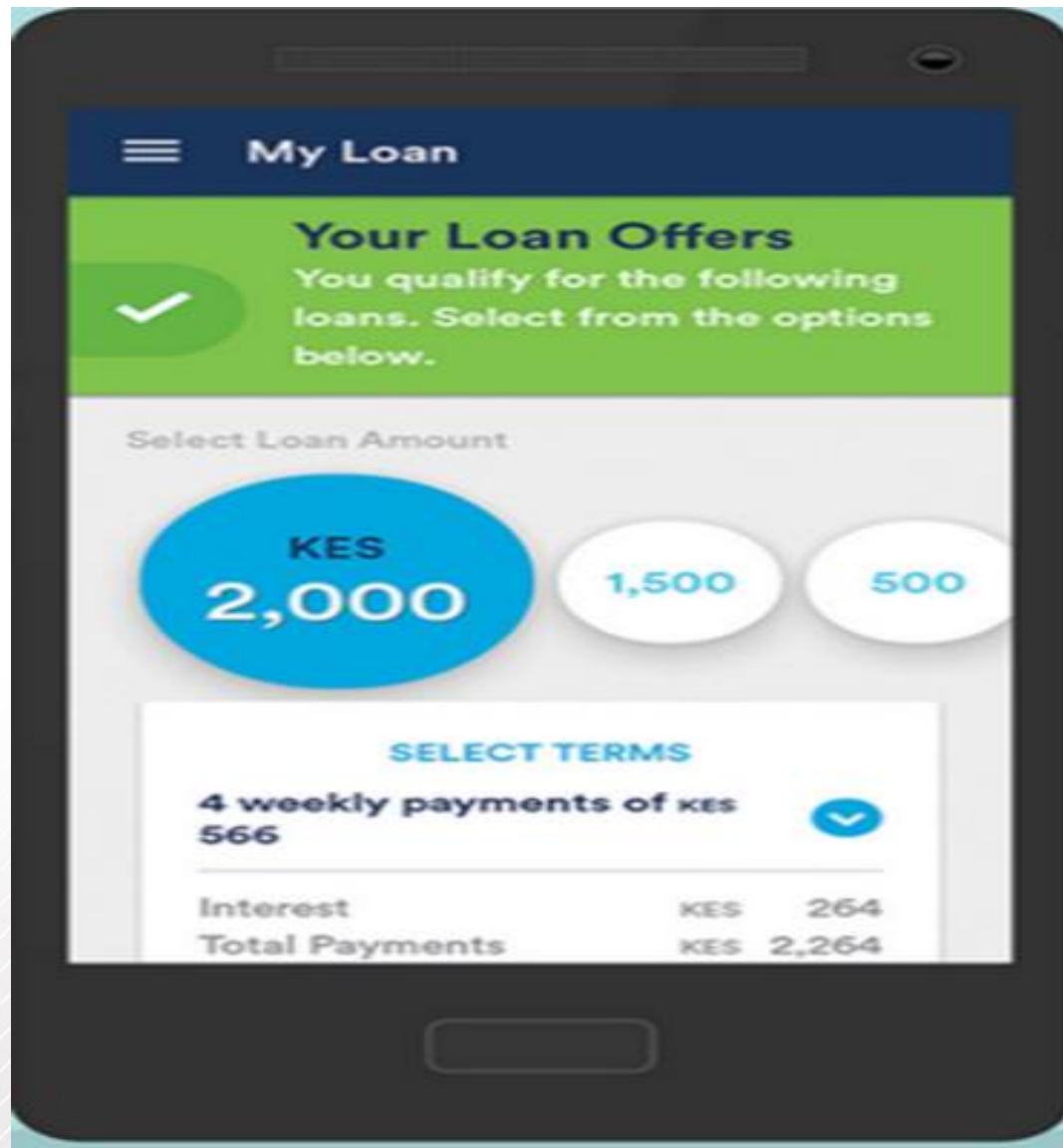


1. This loan is not free (it's 6% per month for this consumer)

2. You need a smartphone to review product terms

3. The link does not contain summary of key costs and terms

# Example 2: Anchoring or steering of consumer to largest loan size available



Significantly larger text and bubble for larger loan amount—steering consumers towards that option

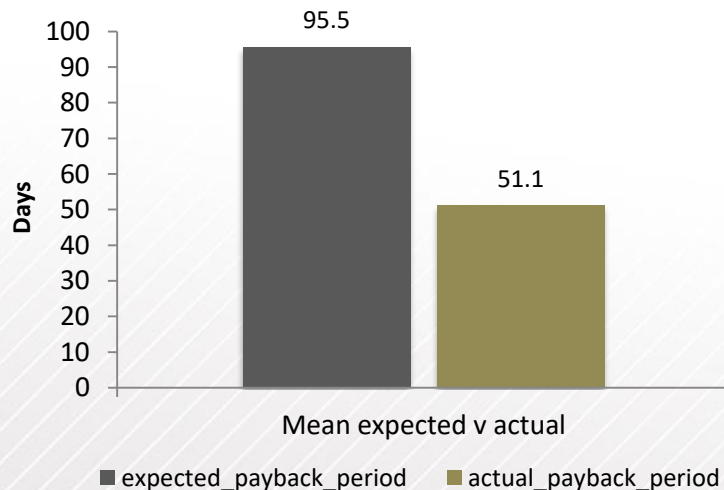


# Example 3: CGAP/Kopo Kopo: Stated versus revealed borrowing behavior

Kopo Kopo merchants using the Grow loan reported the following use of the loan:

- Believe “a smart businessperson should take credit whenever it is available, as a need will always arise.”
- Yet also reported they use Grow “in case of emergency, when they need a loan quickly and are willing to pay the higher cost.”
- First adopt Grow for an emergency –then new uses arise over time (funding payroll, inventory top-ups, paying service providers)

**Avg. expected v actual payback period (days)**



On average, merchants repay their GROW loan **44 days** ahead of schedule

Merchants take up new loans very quickly: **Median time between Grow loans is just 3 days.**

Even merchants who take the largest GROW advances immediately take an additional advance upon repayment

Many merchants are using GROW effectively as a **line of credit**, and forming habits around immediate reuptake

# Example 4: Jumo/CGAP Experiment better disclosure to increase comprehension and improve borrowing choices

Jumo: Digital lender active in Kenya and Tanzania

Challenge: How can CGAP use behavioral design to improve disclosure and consumer borrowing behaviors?

## 1. Lab Experiment

**What?** Decision-making games testing financial product valuation and borrowing behavior  
**Why?** Understand deep behaviors of consumers such as trust, time preference, risk appetite

## 2. Field Experiment

**What?** Airtel Money Transfer to large sample of respondents in Busia region  
**Why?** Test various reminder messages to identify shifts in valuation and understanding of repayment protocol

# Separating finance fees leads to increased price saliency and better borrowing decisions

Choose your repayment plan:

- 1.Repay 228 in 45 sec
- 2.Repay 236 in 1min and 30sec
- 3.Repay 244 in 2min and 25sec

vs.

Choose your repayment plan:

- 1.Repay 200 + 28 in 45 sec
- 2.Repay 200 + 36 in 1min and 30sec
- 3.Repay 200 + 44 in 2min and 25sec

Clarifying interest rates led to a **reduction in default rates** on first loan cycles from **29.1% to 20%**



# Shift to opt out of viewing a summary Terms and Conditions increases viewership

Welcome to TOPCASH:

1. Request a loan
2. About TOPCASH
3. View T&C's



Choose your loan amount:

1. KES 200
2. KES 400
3. Exit Loan

VS.

Welcome to TOPCASH:

1. Request a loan
2. About TOPCASH



Kindly take a minute to view Terms and Conditions of taking out a loan:

1. View Ts&Cs
2. Proceed to loan request

Terms and Conditions **viewing increased from 9.5% to 23.8%** by making it an active choice

Reading the Terms and Conditions led to a **7% absolute drop in delinquency rates**

# Jumo integrated these insights into their new USSD menus in 2016

## 1. Separation of finance charges & principal

**Choose your repayment plan:**

1. Repay 1000 + 35 in 7 days
2. Repay 1000 + 170 in 14 days
3. Repay 1000 + 205 in 21 days

\* Back

## 3. New screen with late payment penalty

**Failure to repay your loan by the due date will result in a late payment fee of <percentage> being added. You may also lose access to KopaCash**

1. Next

\* Back

## 2. Separate line of loan fees with %; Loan term detail

**Loan: 1000**

**Loan Fees: 135 (13.5%)**

**Loan term: 7 days**

**Repayment: 1135 to be deducted from Airtel Money Wallet on <date>**

1. Confirm

\* Back

## 4. Active choice to view T&Cs, old version had only web link

**Agree to the T&Cs below in order to proceed with your loan application. [tc.jumo.world/akec](http://tc.jumo.world/akec)**

1. Agree

2. View T&Cs

\* Back

# App-based digital credit allows for more innovation in disclosure and consumer comprehension

**SMS and USSD do not offer as much room for innovations to increase borrower comprehension and saliency of repayment obligations.**

The screenshot shows a mobile app interface for 'Mkopo Rahisi'. At the top, the status bar shows the time as 5:52 PM. The app header displays the name 'Mkopo Rahisi'. The main content area features a congratulatory message: 'Congratulations! You're approved for a loan of 2000 Ksh'. Below this, the payment schedule is detailed: 'Weekly Payment: 740 Ksh' and 'Total amount to pay: 2220 Ksh'. At the bottom, there are two input fields for the user to agree to the terms: 'I agree to make 3 weekly payments of: [input]' and 'and repay a total of: [input]'. A note at the very bottom states: 'Note: Your first payment is due 7 days from when you receive your loan. Early payments are welcome as well!'.

**Use of larger and smaller font to drive attention and emphasis**

**Breakdown of payment schedule and total payments**

**Consumer fills in repayment obligations, ensuring comprehension of obligations and strengthening commitment to repay.**

# Example 5: Use SMS channel for “Just in time” financial education for digital credit

## M-Pawa (Tanzania) interactive SMS project objectives

1. Enhance in-person financial education program of Connected Farmers Alliance with opt-in SMS learning content
2. Farmers can learn about M-Pawa when and how they want, in bite-size portions
3. SMS content that is self-guided and interactive:
  1. Separate tracks for “How to use M-Pawa”, “Savings” and “Loans”
  2. Loan cost calculator and savings goal-setting tools





# Customers that opted-in to the learning accessed a menu that allowed them to personalize their learning experience

## Main menu

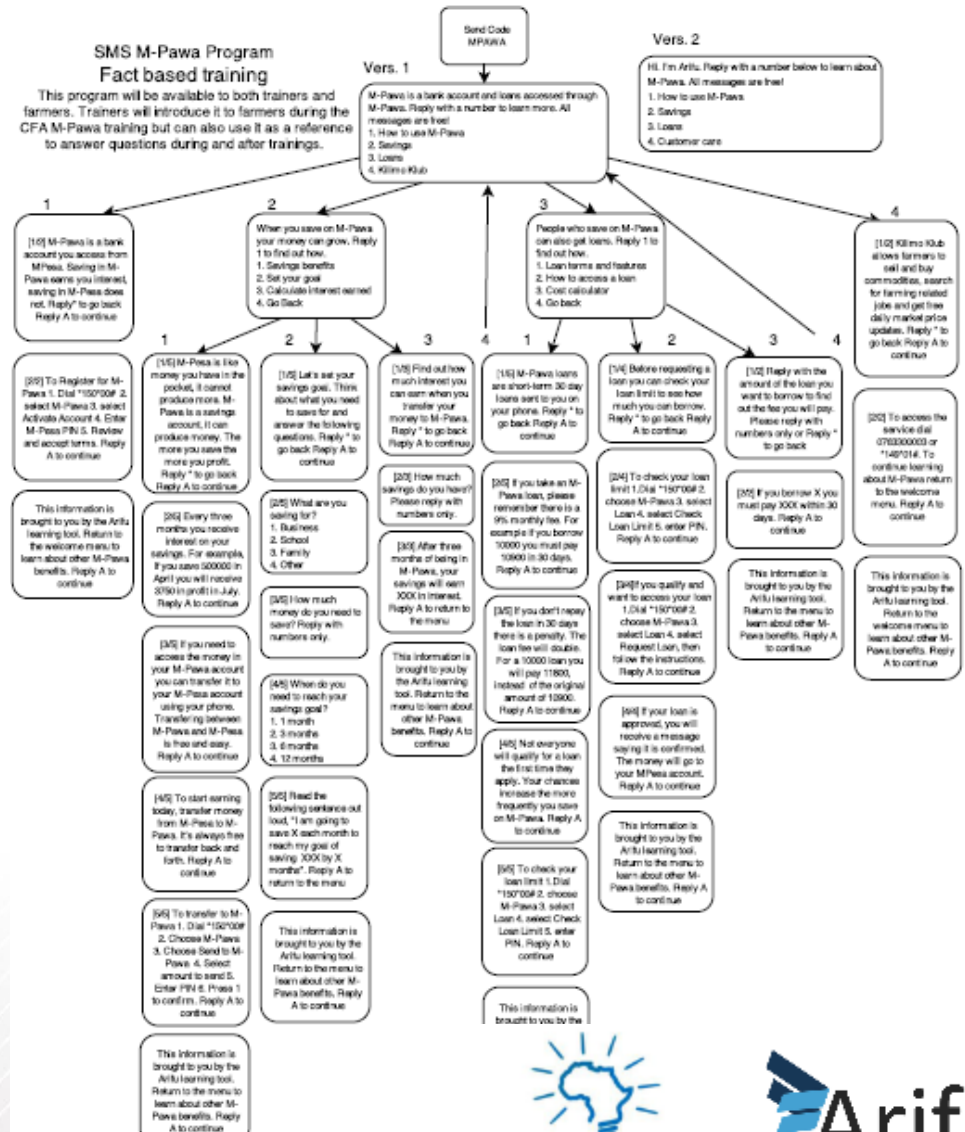
1. How to use M-Pawa
2. Savings
3. Loans

## Savings Menu

1. Saving benefits
2. Set your goal
3. Calculate interest earned
4. Go Back

## Loans Menu

1. Loan terms and features
2. How to access a loan
3. Cost calculator
4. Go Back





# Consumers who engaged with learning content improved activity in M-Pawa accounts

- 2,682 users opted into learning content 4.8% conversion rate
- Average 10 messages consumed per learner

## Savings Behavior:

- Arifu users increase running balances by Tsh4,447 after interaction with learning content (\*\*\*)

## Borrowing Behavior:

- Arifu users take Tsh1,666 larger loans than no-Arifu users (\*\*\*)
- Arifu users have Tsh2,654 lower amounts outstanding and make payments 3.42 days sooner than non-Arifu users (\*)
- Arifu users take Tsh1,017 larger loans after interaction with learning content (\*)
- Arifu users repay loans 5.46 days sooner (\*\*) and have Tsh1,730 larger first payments (\*\*\*) after interaction with learning content

<http://www.cgap.org/blog/can-digital-savings-reduce-risks-digital-credit>

# Digital lenders should follow minimum standards for disclosure and transparency

1. **Present a full accounting of all regular costs of the loan** both in monetary amount and an annualized percentage, prior to acceptance of the loan.
2. **Provide a clear presentation of repayment due dates, amounts, and penalty fees** and when they will be assessed. Where relevant note other consequences of non-repayment.
3. **Make clear whether other products are being bundled with the loan**, and if so, their costs and benefits. Ideally these products should be optional, with a separate opt-in step taken by the consumer.
4. **Present a summary of the key terms of the product**, as a complement to the common practice of listing a weblink to Terms and Conditions, which consumers will likely not review, and which will be impossible to review for those without internet access.
5. **Conduct consumer testing** to identify the best ways to present loan information, convey costs and obligations, and increase consumer understanding of and ability to compare each available loan product.

# Fraud in Mobile Money

# Why Fraud Matters

**1** It diminishes trust in DFS

**2** It hampers the bottom-line of providers

**3** It hampers the growth of Value Added Services on Mobile Money

**4** It can lead to inactivity and OTC

# Uganda: Fraud Can Be a National-Level Problem in Mobile Money

11%

of registered mobile money users in Uganda reported losing money due to **fraud or scam**

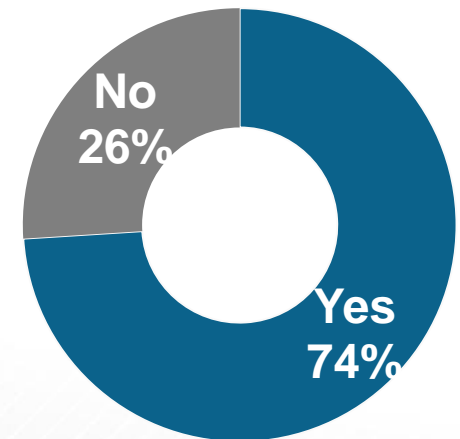
15%

Report that the agent asked for their PIN

58%

Of registered users usually use OTC

Does Agent Assist You?



Source: FITS surveys



# Agent-led fraud



*I withdrew 2200 Ksh but the message on the phone indicates 2250 Ksh*

*The agent asked me for the PIN and entered it without giving me the opportunity to put my PIN myself*

## WFP Kenya: Monitoring of agent behavior with food aid beneficiaries:

- 62% of beneficiaries are not aware of transaction fees
- In only 10% of visits the agent communicated the fees before transacting
- **In 73% of the visits the agent entered the PIN—yet 72% of customers memorize their PIN**

# សូមប្រុងប្រយ័ត្នចាត់ចែងការប្រើប្រាស់ទូរស័ព្ទ!

## Beware of Fraudsters!

In case you have been instructed to do advance transfer or phone top-up to an unknown person for various procedures such as:

- Winning lucky draw from beer companies, phone providers, banks
- Your kids have been awarded with scholarships or your relatives send you money from abroad
- Your relatives are in traffic accidents
- Or any other similar cases

Thank you for using Wing!

For more information: 023 999 989

ព័ត៌មានលម្អិត : 023 999 989



## **SIM Swaps in Tanzania:** Quarantine period after switching SIM cards

### **Tanzania Model:**

- Quarantine period for MM account
- Requirements to appear in person after switching SIM
- Led to dramatic reduction in fraudulent SIM swaps



# Data Protection and Control

# Digital data trails are the engine that drives digital credit deployments

- Lenders leverage various types of digital data to build scorecards (e.g. mobile phone usage, mobile money, social media, self-reported data)
- Data allows lenders to assess risk and make lending decisions remotely and on consumers with limited formal financial data
- Expands the potential market of risk-worthy borrowers



# Data Usage in Digital Credit Raises Consumer Protection Concerns

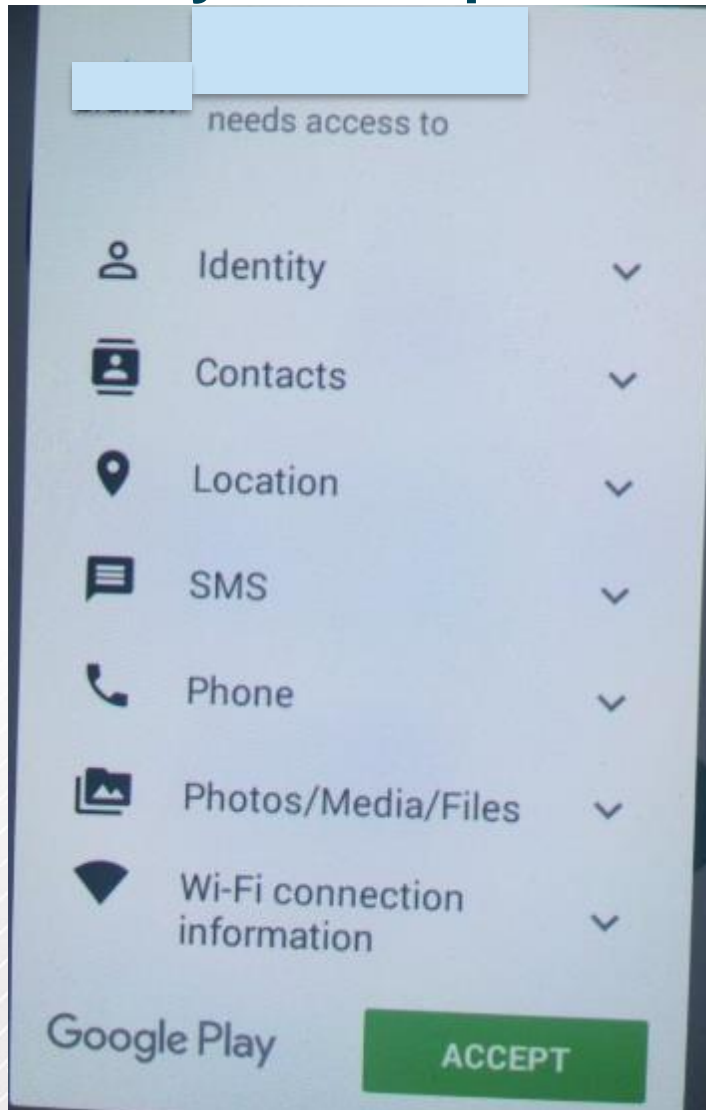
- Lack of consumer control—and ability to view and correct—their data trail
- Unauthorized sharing of transactional information and limited consent
- Sweeping of customer personal information
- Unsolicited marketing by third-parties
- Lack of adequate standards & legal protections in leading digital credit markets

# Data Usage in Digital Credit Raises Competition Concerns

- Information asymmetries for lenders
- Adverse selection & increased borrowing costs
- Network effects & switching barriers
- Barriers to entry and innovations in DFS products and services—in credit and beyond

# What data do lenders collect from consumers' phones?

## Would you accept these Terms & Conditions?



### Standard Form Contract Data Usage Disclosure

**“Each time you visit one of our sites or use one of our Apps we may collect the following information:**

technical information, including the types of mobile device you use, unique device identifiers (for example, your Device’s IMEI or serial number), information about the SIM card used by the Device...

information stored on your device, including contact lists, call logs, SMS logs, contact lists from other social media accounts, photos, videos or other digital content...”

# What Does Data Privacy Mean to Consumers? “Big Data, Small Credit” Omidyar Network Consumer Survey in Kenya & Colombia

## Data Consumers Consider Private

Email Content	82%	National ID	55%
Calls or Texts	82%	Websites	53%
Income	81%	Email Address	48%
Financial	78%	Phone Number	39%
Medical	70%	Age	36%
Social Networking	57%	Education	24%

# Lack of proper rules on data sharing can lead to unethical practices in digital credit markets

0.02K/s 67% 13:34



Kopa Leo



## Disclaimer

We understand that our customers have a right to privacy

“To enable our business model weed out defaulters, we will be posting updates on defaulted payments in the format below in this page. This does not also limit us from sharing such information on other public pages including posting to your social wall.”

days notice to make good their payment before such information is publicly shared.

Name of Borrower	Amount Borrowed	Repayment Date	Remarks
Annie Ayiela	10,000	121215	Not paid
Pauline Wanjiku Njue	7,500	100116	Not paid
Emmanuel Wanunda	4,000	251015	Partial payment
Benard Samoei	2,000	291015	Not paid
Samuel Kamau	2,000	071115	Not paid
Stallone Peter	1,000	231015	Not paid
Joshua Ombeti	1,500	281016	Partial payment



# CGAP/First Access Tanzania: SMS-based approaches to informed consent on data usage

## Consent SMS Approved by Regulators:

**"This is a message from First Access: If you just applied for a loan at Microfinance Bank and authorize your mobile phone records to be included in your loan application, Reply 1 for Yes. Reply 2 to Deny."**

**"More Information" response option added to allow consumers to learn more about how their data is used.**



## **Research questions posed to CGAP by FirstAccess:**

- 1. What do base-of-pyramid consumers understand about digital footprints and credit scoring?**
- 2. What concerns and questions does our approach raise for them?**
- 3. What other information do they want to understand what they are accepting?**
- 4. How can you achieve this via simple SMS?**

# CGAP/First Access Tanzania: SMS-based approaches to informed consent on data usage

**1. “This is a message from First Access: Mobile phone records are information captured when you use your phone, including phone calls, SMS, airtime top-ups, or a mobile money account. Questions? Call First Access 12345678”**

**2. “This is a message from First Access: First Access ONLY uses your mobile phone records to make a loan recommendation to lenders. We NEVER share your personal information with anyone. Questions? Call First Access 12345678”**

# How do we increase consumer access to, and control of, their digital history?

- Low visibility of credit history for consumers in emerging markets
- Need for improved ease of access and ability to correct erroneous information
- Increasing saliency of credit history may increase it's impact on borrower behavior

## Example 2: CGAP/M-Kopa/TransUnion/CIS Kenya: Using digital channels to increase consumer control of credit information and data

# Interactive SMS Program Allows Borrowers to Check and Correct Credit History Easily and Remotely

### 1. Opt in to check history track

Historia yako ya mikopo inasaidia kupata vifaa zaidi na M-KOPA. Jibu na 1,2,3.  
1.Angalia ripoti yako 2.Ripoti ya mikopo ni nini 3.Mengi zaidi na M-KOPA

### 2. Review report and notify if incorrect

Ripoti yako ya mkopo CBA 2178.58 Hujalipa. Ripoti hii ni halali? 1.Ndio 2.La

### 3. Identify incorrect account

Pole sana. Tuko hapa kukusaidia. Jina la aliyekukopesa ambaye rekodi yake si halali?

### 4. Specify reason for dispute

Je, ni shida gani ungetaka kuripoti? 1.Rekodi isiyo sahihi na nililipa mkopo 2.Rekodi isiyo sahihi na sijawahi kosa kulipa mkopo 3.Nyingine

### 5. Confirmation of outbound call from credit bureau

Asante, kwa kuripoti, TransUnion watakupigia simu kwa masaa 24 kutatia shida yako. Pia, unaweza wapigia simu kupitia namba [0730651000](tel:0730651000). Jibu A, kurejea kwa menu

- 24% opt in (384 / 1612 ) + 601 word of mouth users
- 5.7 messages consumed per M-Kopa learner
- 222 of 225 checked credit history successfully
- 66 requests for CRB follow-up
- Indicative data of positive borrowing behavior post-intervention (scaling up testing currently)



# Is the digital credit history we are building accurate?

CGAP pilot survey of 420 digital finance users in Nairobi, May 2016 (results forthcoming)

- 22% noted incorrect information in credit report
  - Incorrect loan balance (33%)
  - Not all loans listed (32%)
  - Loan paid listed as unpaid (23%)
- 22% noted missing information
  - More than half missing information was with digital lenders

# Co-Ownership of Digital Data: How to increase consumer control of their digital data for borrowing

1. Consent and usage restrictions. Use of data on per-transaction basis; clear consent dictating specific data to be shared and intended uses; no sharing or selling of data without express and restricted consent by the consumer.
2. Consumer-led sharing of data in a neutral channel; porting their transactional accounts in a standardized format. This could include mandating the mobile money and other financial data of consumers be allowed to be shared in such a manner.
3. Rules for marketing of credit offers, including opt-in only, rules around clarity of offers and disclosure of key terms in marketing messages.
4. Developing clear lines on what types of data can be shared versus kept private. Define what is consumer-controlled and what is proprietary information in digital credit, and the rules for sharing such information.

# CGAP

Advancing financial inclusion to improve the lives of the poor



Foreign Affairs, Trade and  
Development Canada  
Affaires étrangères, Commerce  
et Développement Canada



BILL & MELINDA  
GATES foundation

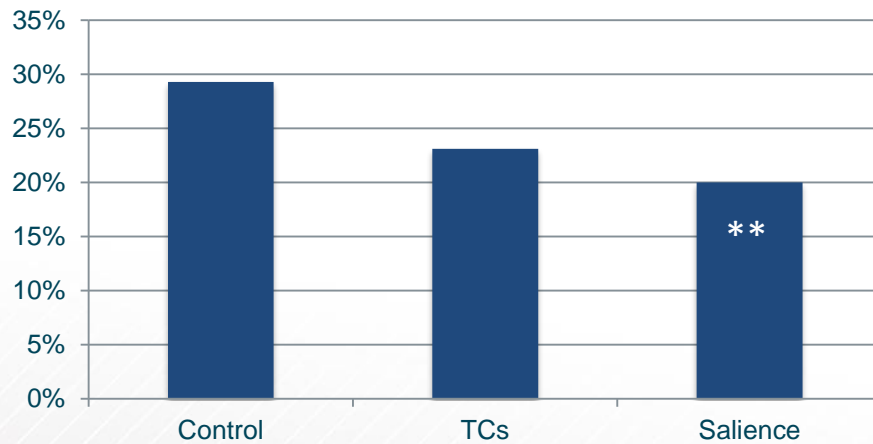


MetLife Foundation  
Ensuring Access. Empowering Communities.



# Borrowers defaulted less with the two improvements in disclosure—while not reducing the loan amounts they took

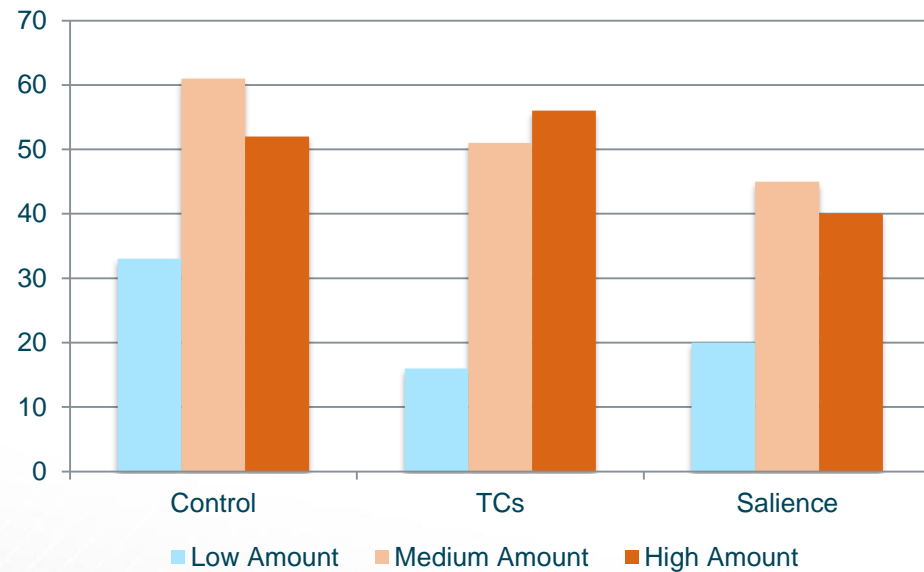
## Treatment Effect on Default Rates



Behavioral Framing Variation

\* = 10% Significance, \*\* = 5% Significant, \*\*\* = 1% Significant

## Loan Selection by Treatment



Behavioral Framing Variation