

Informed Consent

How Do We Make It Work for Mobile Credit Scoring?

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Project Summary

First Access (www.firstaccessmarket.com) is a data analytics company that works with lenders to use mobile data to predict credit risk for base-of-the pyramid (BoP) financial consumers. The mission of First Access is to help these lending institutions reduce their lending costs by predicting credit risk for clients in the informal sector, billions of whom are still shut out of the formal financial system due to lack of collateral or quantifiable information about risk. To better protect and inform these consumers, First Access approached CGAP to help them use consumer research to determine the following:

- What do consumers understand about their mobile data, and how it is being used by financial service providers?
- What methods for informed consent might help ensure that individual borrowers understand how First Access uses their information?

Working directly with BoP consumers in Tanzania, CGAP and First Access used a series of field tests to determine appropriate methods for informing borrowers in Tanzania how their data will—and will not—be used by First Access. These research methods and findings are the subject of this paper and have important implications not only for First Access, but for appropriate and responsible use of consumers' mobile records for financial inclusion globally.

Key findings from the research include the following:

- Consumers expressed strong interest in the way their data could be used for loan determination, not just how this data would be kept private. Furthermore, many consumers noted that the need for a loan would supersede concerns for privacy, making clear why it is important for providers to develop standards for informed consent and data protection up front in product development.
- Consumers can gain a basic understanding of concepts of data privacy and credit scoring through simple messages.
- At the same time, a single message may not be sufficient for consumers to fully understand the use of their mobile data, so opportunities for follow up should be built into the process.
- Data usage and data privacy are interlinked in consumers' understanding of the process, and so may need to be presented in a single message to highlight their linkages.

Data Analytics and Financial Inclusion

The increase in the number of mobile phones worldwide has offered new mechanisms for both communication and financial services. A key component of such rapid mobile phone uptake is the increase of “[digital footprints](#)”¹ in the form of mobile phone and mobile payments records. Using nontraditional data and analytics (NDAA) to capitalize on this information presents significant opportunities for financial inclusion, particularly for those at the base of the pyramid (BoP) who lack other formal transactional records. Financial service providers (FSPs) can draw on analysis of current and potential customers’ digital footprints to better understand behaviors and preferences, which in turn will allow them to better target and customize product offers and to manage risks. While nascent, this trend is observable in BoP markets in the growth of mobile financial services, including loans and insurance that benefit from new analysis of data such as mobile phone usage, payments, and even social networking.

The increased use of digital footprints raises several important opportunities for financial inclusion:

- We have little knowledge of BoP consumers’ understanding of the concepts of digital footprints, how much they value privacy, and how it affects their uptake and usage of innovative financial services.
- There may be a disconnect between consumers’ stated privacy preferences and their willingness to accept usage of their personal data if it poses even a small barrier to accessing a valued product or service.²
- The use—and communication of use—of consumers’ personal data could play an important role in building trust in innovative financial products that is vital to consumer uptake and usage of products.
- Consumers’ personal data can help providers evaluate consumers’ needs and provide product recommendations and decisions on applications that could both increase accuracy of risk assessment and reduce costs to conduct these assessments.
- The issue of data privacy on the internet and in telecommunications has been receiving increased attention from policy makers, including in emerging markets and developing countries (EMDEs). It is important to develop consumer-friendly approaches to any rules on data storing and usage that promote protection while enabling innovations that hold promise of

¹ “Digital footprints” refers to the data history consumers accumulate through transactions and other behaviors that are conducted via digital channels.

² A recent GSMA survey on consumer perceptions on mobile privacy found that while “83 percent of mobile internet users have concerns about sharing their personal information when accessing the internet or apps from a mobile phone, [...] 8 out of 10 users agree to privacy notices without reading them because they tend to be too long or legalistic.” http://www.gsma.com/publicpolicy/wp-content/uploads/2014/02/MOBILE_PRIVACY_Consumer_research_insights_and_considerations_for_policymakers-Final.pdf

expanding access to appropriate financial services for the unbanked.³ This will require testing of different methods for disclosure and informed consent by consumers for the use of their data.⁴

I. Research Design

The research was conducted in two stages:

1. Twenty-four open-ended interviews to explore general concepts and develop hypotheses (12 conducted in Mwanza, 12 conducted in Dar es Salaam).
2. Eight follow-on focus groups (four each in Mwanza and Dar es Salaam), with a total of 64 consumers, which lab-tested two aspects of informed consents:
 - a. Several scenarios for SMS messages to consumers about First Access and how it uses their mobile phone records for a one-time scoring of consumers applying for loans,
 - b. A fact sheet about how this credit-scoring process works.

Both consumer samples included a mix of financially experienced and inexperienced consumers. The two stages were intended to incrementally draw out broader insights on privacy and security; discuss in more detail these issues in the context of mobile and financial services; and identify and test informed consent approaches specific to First Access' credit-scoring services.

Box 1. Definition of Key Terms Discussed in This Publication

Algorithm: A procedure or function that includes a series of steps that are followed to solve a problem or complete a process.

Data Analytics: Using consumers' data to evaluate their past, current, and potential future behaviors to understand and predict future actions and develop targeted marketing and product offerings.

Digital Footprint: The set of data that an individual generates through use of digital platforms such as the internet, mobile phones, and financial transactions.

Informed Consent: Advance notification to consumers of how their information is to be used for a specific transaction or process, presented with the option for the consumer to accept or refuse the use of this information.

Mobile Transaction Data: A consumer's history of transactional activity conducted on his or her mobile phone. This often includes frequency, location, and recipient of calls and SMS, browsing history, purchase of airtime, and use of mobile financial services.

³ <http://www.afi-global.org//library/publications/mobile-financial-services-consumer-protection-mfs-2014>

⁴ This testing includes exploring the implications and ethics of default settings that require consumers to affirmatively agree to data usage and sharing by providers versus settings that force consumers to actively opt-out of data usage and sharing if they want their information to remain private.

Open-ended interviews—key objectives

- *Exploring general conceptions of privacy and security in Tanzanians’ lives.* Market use of mobile data is relatively nascent, so few consumers would have had upfront knowledge of how using their mobile phone creates data records. Research therefore began by exploring how Tanzanians conceive of privacy in general, probing on financial, personal, and social information, including how individuals share and protect this information in their family, business, and community. This included the use of ranking exercises where common items, family and community members, and concepts were ranked by the participants in order of priority to protect or keep secure. (See Annex 1. Interview Field Guide.)
- *Probing on trust in mobile phones, mobile money, and financial services delivered in new ways.* The significant penetration of mobile phones and mobile money allowed consumers to share actual experiences and insights on trust in and usage of mobile phones and mobile money, and draw comparisons with traditional financial services and providers.
- *Identify key consumer concerns and what measures would address these concerns.* The final goal of the interviews was to test initial messaging on mobile phone records and First Access’ services. These initial conversations helped to identify a series of key consumer concerns, areas where they would like more information, and messages that First Access could use to ensure consumers understand the product and feel sufficiently protected.

Focus group discussions—key objectives


- *Test SMS messaging with consumers (Table 1).* Based on consumers’ concerns and requests for further information expressed during the open-ended interviews, an introductory authorization message and two follow-up messages (limited to 160 characters or fewer)—explaining mobile phone records and assuring confidentiality—were developed and tested in a live setting on consumers’ mobile phones. These messages were sent to consumers as though they had just applied for a loan, and both would confirm consumers’ consent to the use of their mobile data and provide follow-up information on what these data contain and how they will be used.
- *Provide supplemental information in physical hand-out format (Figure 1).* Initial interviews with consumers revealed that there might be a need for information printed in hard copy in addition to the series of SMS messages. As such, a one-page information sheet was developed and tested.
- *Identify remaining consumer concerns and areas for further messaging.* The final aspect of the focus group discussions was to identify areas where the SMS and supplemental information may not suffice, to gain insights on refinements to current messaging, additional messaging, and possible face-to-face or phone interactions with consumers.

Message Type	Message Text
1. Informed Consent Message	“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 for More Information. Reply 3 to Deny.”

2a. Mobile Phone Records Explanation Message	“This is a message from First Access: Mobile phone records are information captured when you use your phone, including phone calls, SMS, airtime top-up, or a mobile money account. Questions? Call First Access 12345678.”
2b. Privacy Message	“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 personal information with anyone. Questions? Call First Access 12345678.”

Figure 1. Supplemental Information One-Pager Tested with Financial Consumers (translated from original in Swahili)

How First Access works with your Lender



- 1** You apply for a loan at a financial institution
- 2** Your loan officer texts your mobile number to First Access
- 3** First Access sends you a text message
- 4** You decide if we may use your mobile phone records (reply “1” if yes)
- 5** First Access makes a loan recommendation to your loan officer by text message

Questions? Contact your loan officer or call First Access at 12345678.

Mobile phone records

Information captured when you use your phone. Examples include:

- ✓ Phone calls
- ✓ Airtime top-up
- ✓ Mobile money
- ✓ Texts
- ✓ Bill pay

How we keep your mobile data safe

First Access will *never* share your personal information with anyone.

First Access will *never* read your text messages or hear your calls.

***Never* send First Access PIN or bank details. We will never ask for that information.**

II. Consumer Understanding and Perceptions of Privacy

General versus mobile and financial privacy concerns

Concepts of privacy and the value people attach to different dimensions of privacy are likely to be quite culture and context specific. Therefore, the insights presented here on consumers’ perceptions of privacy and related privacy risks should not be generalized too broadly beyond mobile money users in Tanzania applying for loans. However, the practice of engaging with consumers on broader concepts of privacy before discussing mobile phone records is an approach that should be applicable across markets, and an essential step to identify common concerns consumers may have. This research found that the

method of starting with more familiar issues or items (such as personal and familial information, or household goods) allowed for broad insights on privacy that both built comfort and could be compared later with the specific comments on privacy in mobile and financial products and services.

In Tanzania, most consumers considered their personal and social information very private, keeping it closely guarded. They were less protective of mobile phones and financial products, generally trusting the services and providers. This was reflected in some of the concerns consumers raised about use of their mobile data, which frequently connected back to concerns about their personal or social information.

For example, during discussions on mobile phone records, a common concern was that this would allow others to read the content of their SMS messages or listen to their phone calls. While this would never occur under First Access' product design and data privacy protections, the consumers' association of that risk with sharing mobile phone records reflects their greater concern over protecting access to personal information than protecting transactional aspects of their mobile phone records. This and related insights demonstrated that consumers were generally receptive to the concept of mobile credit scoring, assuming their personal and social information is kept private. This step was followed by probing on particular concerns and information needs consumers may have.

Phone security risks and self-protection methods

While phones were generally trusted and highly valued by consumers, physical security of phones and the information they contained was a recurring concern. For example, consumers repeatedly cited several mobile phone security and privacy issues they had either experienced or heard of others experiencing:

- Sharing of PINs with relatives or friends, which can lead to unauthorized usage of their phone or mobile money.
- Family members using their phones, both authorized and unauthorized.
- Phishing scams on mobile money services that can lead to loss of mobile money funds. In the 2013 Tanzania Financial Inclusion Tracking Survey, 7 percent of respondents reported suffering some form of fraud regarding mobile money.
- Poaching of business clients by others who gained access to their phone and contacts list.

Consumers also had several ways in which they had learned to self-protect against these risks. For example, some consumers who had been forced to share their PIN with others for various reasons made sure to change their PIN regularly. Other consumers, concerned about phishing and other mobile money scams, would employ multiple SIM cards, using one SIM for day-to-day transactions, while having a second SIM upon which they stored mobile money, in a way that mimics a savings account. By keeping this second SIM with the stored value physically out of the mobile phone they felt they were less likely to lose those savings through scams. (While not mentioned by the consumers, an additional benefit to such a strategy could be the physical barrier this creates to spending that balance, making it easier to resist temptations that arise and keep their savings from gradually depleting over time.) This finding also has important implications for credit scoring. It will be important to make sure consumers understand

the value of sharing all phone numbers and SIMs, not just the one through which they receive the SMS from First Access, so that they receive as accurate a loan recommendation as possible given their full mobile financial footprint.

III. What Do People Understand about Mobile Phone Records and Mobile Credit Scoring?

The primary motivation for this research project was to explore the challenge of informing consumers in a meaningful way how their mobile data were to be used to determine an appropriate loan size, while recognizing that there was limited time and space to include this information during the sales process (including the limits of a 160-character SMS message), and that most consumers would not be familiar with the concept of mobile phone records at the outset of their relationship with First Access.

At the same time, our discussions with consumers about mobile phone records and mobile credit scoring revealed that the concept, while new to the consumers, could be effectively linked to both mobile phone usage and mobile money, two concepts consumers were already familiar with, at least minimally. Because of this, consumers were able to intuit what the basic concept and contents of mobile credit scoring would entail.

“...First Access links the community with financial institutions and they are the ones who will be recommending loans for us...” —Male, financially inexperienced, Mwanza

“...First Access will be like a network provider and will record everything that I do so if I fail to pay the credit that I borrowed then I will also be denied a loan...” —Male, financially inexperienced, Mwanza

By anchoring mobile credit scoring under the broader context of mobile phone and mobile money usage patterns that consumers are familiar with, it may be possible to quickly and effectively explain the concept and inform consumers at a basic level what this entails, while providing them follow-up opportunities to ask questions and learn about their data privacy rights.

At the same time, many consumers, once they understood the concept, started to speculate on how they might be able to change their usage patterns to improve their chances of getting a loan, a phenomenon that was documented in a recent MicroSave study of M-Shwari consumers as well.⁵

“...My records are very useful, if I use a lot with my phone then I can get a loan...” —Female, financially experienced, Dar

“If my mobile phone is not very active, then I may not qualify for the credit.” —Male, financially inexperienced, Dar

Therefore, providers should be careful when using examples of types of mobile phone records (e.g., SMS messages or airtime top-ups) to explain the usage of this information for credit scoring purposes, so that

⁵ http://www.microsave.net/files/pdf/BN_139_M_Shware.pdf

they do not imply that these indicative examples carry disproportionate weight in determining creditworthiness.

Another common frame of reference consumers used to understand the process of mobile credit scoring was how it may be different from their past experiences with loan application and approval processes. This is an important contrast drawn out by the consumers, as it may point to ways in which mobile credit scoring can be a more transparent process than traditional credit scoring. Consumers in past CGAP research have described credit information systems as a “black list” and often view these systems in a strictly negative manner as a barrier to their access to loans. These experiences with traditional loan processes at banks, microfinance institutions, and others were raised in the Tanzania research. But more interesting was how the consumers contrasted these previous experiences with borrowing based on mobile phone records. Three differences were revealed:

1. Many consumers felt that mobile phone records would more fairly capture who they were as a consumer by measuring more than just their past access to loans.
2. Consumers also expected the process to be simpler, faster, and possibly require less documentation. Consumers also believed that the use of mobile credit scoring would save them from having to pay bribes to loan officers to gain access to a loan, an additional improvement over the current system.
3. Finally, there was a common feeling among consumers that they would be able to understand the criteria they were being measured and evaluated on more clearly with mobile credit scoring methods.

However, it is important to make clear to consumers that mobile credit scoring does not mean non-creditworthy consumers will now be given loans, and that it instead allows for better assessments of consumers’ risks from new and expanded information sources available via mobile phone and data sources. Similarly, many financial institutions using mobile credit scoring methods will still use other methods of assessing risk and determining lending amounts alongside mobile phone records. As such, some of the assumptions consumers made about how this process would be different or better than traditional credit scoring may not hold in all cases. Yet, even with this important caveat, there is a significant opportunity to convert a cumbersome, opaque, and often negative experience for many consumers to a more open, understandable, and even empowering process that could have benefits for financial inclusion.

IV. Using Consumer Feedback to Develop Informed Consent Messages

In addition to explaining and exploring the concept of mobile credit scoring more broadly, the initial interviews presented consumers with the scenario where they would be applying for a loan, and would then receive the SMS informed-consent message First Access will use:

“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 for More Information. Reply 3 to Deny.”

Generally, respondents selected “Yes” or “More Information,” demonstrating their acceptance of the concept of mobile phone records being used for this purpose. They also noted that they would like a way to follow-up afterwards, preferably via phone, if they had any further questions.

Consumers also raised concerns they had with either the SMS message or the model in general, and through the 24 initial interviews, the research team identified several recurring concerns or needs consumers had:

- Viewing of personal private information in phone calls and SMS messages.
- Lack of understanding on what specifically mobile records will contain.
- Lack of understanding about how the scoring process will work with First Access.
- The risk of scams and false messages purporting to be from First Access.
- The option to receive a follow-on text with more information or to call a First Access hotline before agreeing to allow First Access the use of their mobile phone records for credit scoring

Broadly, these and other consumer feedback can be categorized into two primary consumer needs: assurance and education. Using these insights, the research team developed two additional SMS messages and a one-page information sheet that were tested with consumers (see Table 1 and Figure 2). To assure consumers, messaging was developed to make clear the following:

- First Access will never share their mobile phone records with anyone.
- First Access will never read the content of consumers’ text messages or listen to phone calls.
- First Access will never ask consumers for their PIN or bank account details (this is important so consumers could easily identify a potential phishing scam where the caller or SMS sender purports to be from First Access).

To educate consumers, messaging was developed that did the following:

- Explained what mobile phone records were.
- Described step-by-step the process by which First Access uses a consumer’s mobile phone records for credit scoring.
- Incorporated a direct phone number for First Access in all messages and materials.

Consumers also noted that, even if they were to allow access to their mobile phone records to help with the credit evaluation process, they would still appreciate the additional information.

V. Testing Informed-Consent Messages with Consumers

The messages developed to assure and to educate consumers regarding First Access’ services and practices were lab-tested in eight focus group discussions, with a total of 64 consumers, including a mix of financially experienced and inexperienced consumers.

Table 2. Composition of Focus Groups			
Focus Group Location	Gender of Participants	Age Range of Participants	Financial Experience Level
Dar es Salaam	Female	31–45	Experienced
Dar es Salaam	Male	28–30	Experienced
Dar es Salaam	Female	27–34	Experienced
Dar es Salaam	Male	28–44	Inexperienced
Mwanza	Female	33–43	Experienced
Mwanza	Male	26–45	Experienced
Mwanza	Female	26–32	Inexperienced
Mwanza	Male	27–37	Inexperienced

The testing included three separate SMS messages and a one-page fact sheet. All consumers were presented with the following scenario:

Imagine you are currently looking for a loan to help with an expense in your household or business. (Ask a few participants for examples of types of expenses they might need a loan for.) Imagine that I am a loan officer from a microfinance bank, and you have just come to me seeking a loan. In addition to telling you about the loans we have, I have asked for your phone number, and told you to expect a text message about your loan request.

The participants were then given the three SMS messages in one of two possible orders, followed by the fact sheet. After each message was provided, participants were asked to choose what their response would be in the hypothetical scenario (such as whether they would allow or deny First Access use of their mobile data), comment on their understanding of the message and its clarity, and provide other suggestions to improve the information provided.

Testing of SMS Message 1: Permission to use mobile phone records

Participants first received the introductory SMS message on their phone:

“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 for More Information. Reply 3 to Deny.”

Participants were then asked to choose among the “Yes/More Information/Deny” set of options. Most participants chose “More Information.” This suggests consumers will need at least some education on the use of mobile data for loan processing before they will agree to such a tool. Only two of the 64 consumers replied “Deny,” while 13 specified “Yes.”

Response	Number of respondents (out of 64)
Yes (First Access may use my mobile records)	13
No (First Access may not use my mobile records)	2
More Information	49

Both individuals who chose “Deny” explained their choice based on concerns of personal privacy—“this is private information and I don’t want anyone to see,” and “I don’t want anything to do with my records to be seen by anyone.”

Many of those who chose “More Information” were concerned that they had been looking for a loan, and did not expect this request related to mobile phone records. This indicates the connection between the two was not immediately apparent, and likely would require more explanation. For example, one participant mentioned, “I thought I am expecting a message regarding my loan application but not about my phone records,” while another commented, “It is not clear because it talks about my mobile records while I wanted a loan so I don’t understand the relationship between the two.”

These participants also expressed concerns because they had not heard about the use of mobile phone records from loan officers in the past—demonstrating the important role sales staff may play in the process. Many also said they were not sure what they were agreeing to by replying “Yes.” These concerns can be seen in the 38 “More Information” respondents that classified the message as “Unclear,” compared to just seven “More Information” respondents who classified the message as “Clear.” This contrasts with the participants who chose “Yes,” nine of whom classified the message as “Clear,” compared to just two of whom classified the message as “Unclear.”

Those who said “Yes” in response to the initial message generally gave one of two types of reasons. Some agreed to the use of their mobile records because they needed the loan and did not care about the method. To have fully “informed” consent, these types of consumers should also receive additional education on what they are agreeing to. The rest of the respondents who said yes said they understood the message and were fine with the use of their data.

Testing of SMS Message 2a: Explanation of mobile phone records

The number of respondents expressing confusion and uncertainty about how their mobile phone records would be used in the first SMS message responses demonstrates the importance of helping to make the concept of mobile phone records clear to consumers upfront. This was the intention of the SMS message 2a:

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

Participants’ comprehension of this message was quite varied, and points to the challenge of explaining a new and complicated topic, such as mobile phone records, via a simple SMS message. Broadly, participants’ understanding of the message fell into four categories (see Table 4).

Response	Number of respondents (out of 64)
Strong understanding of mobile records	28
Concerns about privacy	27
Focus on specific aspects of mobile records	5
Unclear on overall concept	5

Nearly half of the respondents expressed strong understanding of mobile records after receiving this message. They gave responses such as “the message is clear, it tells me that First Access will use my records to give me a loan,” and “my mobile records are anything that I do with my phone.”

A similar number of the respondents raised issues that demonstrated either misconceptions or concerns about the privacy of their mobile phone records. Misconceptions included interpretations of the SMS message such as “every time I use my airtime First Access checks what I do with my phone,” “my SMS conversations will be tracked,” and “records of my conversation will be seen by First Access.”

Other consumers appeared to understand the concept, but still had concerns about the use of their personal information, such as “I don’t want my records to be seen,” or “I will not have any privacy to my phone, everything that I do will be captured.”

A few respondents focused only on a specific component of the broader mobile phone records message. For example, “every time I top up that record is captured,” or “First Access will look at my M-PESA savings and who I call for me to qualify for a loan.”

Finally, a small number of respondents did not appear to understand the concept of mobile phone records after the SMS message was received. For example, some thought it meant they were already approved, noting, “it means that I should be credit worthy, if I borrow money then I should repay within specific time,” as well as “I have passed the first stage of vetting and I have hopes of getting the loan,” and “First Access will deduct my loan whenever I top up airtime.”

Consumers’ hesitations about the use of mobile phone records were also demonstrated in their voting whether they felt the SMS provided the information they were seeking, where 19 responded affirmatively to this question, but 35 responded that they did not feel it provided the information they were seeking. Many respondents asked follow-up questions about how the records would be used, demonstrating a desire for greater understanding of the loan determination process. They also continued to have questions about what the actual records are, seeking an additional definition to what was provided in the SMS. Finally, they had questions about how First Access would ensure confidentiality of the records.

A related but perhaps more hopeful observation was the high number of consumers—38 in total—that cited the phone number of First Access provided in the SMS as “particularly useful.” Many of these respondents noted this number would help them follow up to get clearer answers to their questions about use of their mobile records, while a smaller group noted how this added legitimacy or authenticity to the message itself. The challenges consumers had in understanding, to their satisfaction, their mobile phone records and how they would be used by First Access, combined with their positive response to the First Access phone number provided, point to the importance that follow-on communication will play in closing any gaps in understanding or trust consumers may have, even after they have consented to the use of their mobile phone records and received a brief explanation of what those records include (see Box 2.).

Testing of SMS Message 2b: Privacy of information

Consumer feedback to the SMS message regarding mobile phone records showed a high number of consumers with lingering privacy concerns over the use of their mobile phone records and related personal information. SMS Message 2b was intended to help address these privacy concerns by assuring consumers how their information *will not* be used:

“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 personal information with anyone. Questions? Call First Access 12345678.”

Participants’ interpretation of the SMS message on privacy did not vary as widely or indicate as much confusion as did the SMS message on Mobile Phone Records. For those participants who understood the SMS message (all but six respondents), they treated the first and second sentences of the message as separate topic areas, with the first sentence relating to how information is used to help secure loans, and the second relating to how information is protected (see Table 5).

Initial response	Number of respondents	Focused on:	Number of respondents (with overlap)
Understood message	58	Information use	38
		Confidentiality	24
Misunderstood message	6		

Respondents were much more interested in the loan process, and the way their information would be used for loan determination, than they were in the privacy of their information. While the intent of this SMS message was to convey privacy information, more respondents focused on the first sentence, which appeared to them to emphasize the use of information to secure loans, than on the second sentence, which emphasized the privacy of information. In addition, the respondents were asked which aspects of the message were unclear, and most continued to focus on the use of information for the loan process, rather than privacy. Finally, when asked whether the message provided the information consumers were looking for, 32 respondents replied “Yes,” versus just 15 “No,” with most “Yes” respondents noting that the message had explained how their information will be used or what First Access will do with this information.

Box 2. Importance of Follow-Up Phone Number

Participants placed great emphasis on the follow-up phone number provided in each SMS message, with many saying they would call it to seek more information. This emphasis has at least two implications:

1. The people who answer the phones for this phone line will be the “face” of the organization for many consumers. They will need to be well trained and be able to explain how mobile data records work and why a consumer should trust First Access or a similar company.
2. The phone number will be most important when the service is first launched and few have tried the service. It will be less significant later on, once the first round of consumers have used the service and are comfortable with it, and once information spreads through word-of-mouth that it is a safe thing to do.

Participants’ responses to Message 2b were surprising in their mix of focus on both the primary intended message of privacy of information, and the additional information provided on how their mobile phone records are used to make loan recommendations to lenders. While it was not the intent of the message to speak to both concepts, participants’ feedback may argue for the use of messages that combine both messages, as there appear to be links across the two and seeing the concepts side by side may in fact help consumers understand both the credit scoring process and the protections put in place during the process.

Outstanding Questions

Respondents had questions and concerns that were not addressed in the SMS messages. These may need to be addressed in some other way to ensure consumers understand what they are agreeing to, and to improve trust in the use of mobile data for loan determination. These questions include the following:

- Is this the only requirement for the loan?
- What happens to those who decline?
- Will I be asked to share my PIN?
- Where will First Access get my information?

Respondents also had a few general concerns about the implications of using mobile data for loan processing. Some respondents were concerned that people who “don’t use their phone much will be disadvantaged” by the process. Others use their phones for group activities, which raised concerns. One respondent said, “Since I keep money for my members, [First Access] can find wrong information.” This respondent may be storing money for a savings group or something similar, and does not want others’ financial activities affecting his mobile credit score.

Testing of Information Fact Sheet

While SMS messages offer an instant, easily traceable, and confidential channel to inform consumers, a single SMS cannot explain in detail difficult topics, such as mobile phone records, nor can it link all the different consumer concerns and informational needs and steps in the credit scoring process via a single medium. The SMS messages are also limited in that they will reach consumers only during the point of sale, yet it may be useful to educate potential consumers on mobile phone records before they are faced with a decision to allow use of their mobile phone records during the loan application process.

For these reasons, the research team developed and tested a simple fact sheet that could be used by providers’ field staff, such as loan officers, to provide additional information across a range of topics, including, how the First Access credit scoring process works, broken down in five stages. These messages both echoed messages sent via SMS and presented new and supplemental information to complement the SMS messages.

In all focus groups, the fact sheet was presented after the three SMS messages. Doing so allowed the discussion to be focused less on reactions to the concepts presented, and more on participant understanding of, and focus on, different messages conveyed in the fact sheet. Participants were asked a series of questions where they had to indicate the following:

- Up to three items that most caught their attention.
- The information they found most useful.
- The most difficult part of the document to understand.
- Whether the information helped to explain the text message received.
- Whether the information would change how they would reply to SMS Message 1 requesting authorization to use their mobile phone records.
- Any additional questions the fact sheet did not answer.

As Figure 2 demonstrates, participants’ attention tended to cluster around certain information points on the fact sheet. The messages on protection of information and the loan recommendation process dominated the choices for items that caught consumers’ attention, as well as the information they found the most useful. The definition of mobile phone records also drew the attention of many participants.

Participants also appreciated the phone number of First Access, similar to their feedback on the SMS messages. The overall low responses about what parts of the document were difficult to understand is encouraging, but could also be due to the fact that by this point in the focus groups, all participants had

received three SMS messages and heard discussion of both First Access and mobile phone records from their peers, so a learning effect likely explains part of their ease of understanding. However, the previous discussions did not cover the process of how First Access works with the financial institution to recommend a loan, and so the low level of confusion noted by participants around that aspect of the fact sheet may mean a simple, sequential explanation of the process can help to inform consumers and answer some of their questions.

The one area where consumers still appeared to lack full understanding was the exact information that will be captured and used as part of this process. Despite providing examples of common elements of mobile phone records on the fact sheet, participants still had questions on the process. However, this is a fairly complex and sensitive topic, so further research is required to develop communications materials that sufficiently explain this to consumers.

Figure 2. Items That Most Captured the Attention of Focus Group Participants on Fact Sheet (up to three selections per participant, translated from original in Swahili)

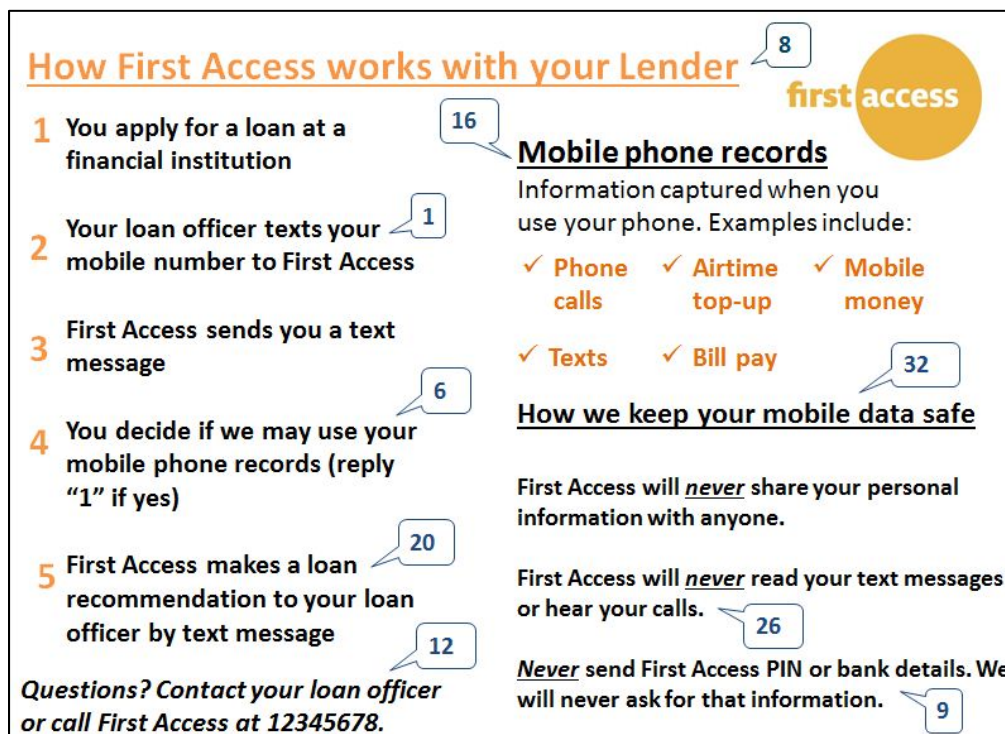


Figure 3. Items That Focus Group Participants Found Most Useful on Fact Sheet (up to three selections per participant, translated from original in Swahili)

How First Access works with your Lender 2

1 You apply for a loan at a financial institution

2 Your loan officer texts your mobile number to First Access 1

3 First Access sends you a text message 3

4 You decide if we may use your mobile phone records (reply "1" if yes)

5 First Access makes a loan recommendation to your loan officer by text message 6

11

Questions? Contact your loan officer or call First Access at 12345678.

first access

Mobile phone records

Information captured when you use your phone. Examples include:

- ✓ Phone calls
- ✓ Airtime top-up
- ✓ Mobile money
- ✓ Texts
- ✓ Bill pay 8

How we keep your mobile data safe

First Access will *never* share your personal information with anyone. 10

First Access will *never* read your text messages or hear your calls. 7

Never send First Access PIN or bank details. We will never ask for that information. 6

Figure 4. Items That Focus Group Participants Found Most Difficult to Understand on Fact Sheet (up to three selections per participant, translated from original in Swahili)

How First Access works with your Lender 3

1 You apply for a loan at a financial institution

2 Your loan officer texts your mobile number to First Access

3 First Access sends you a text message

4 You decide if we may use your mobile phone records (reply "1" if yes) 1

5 First Access makes a loan recommendation to your loan officer by text message 1

1

Questions? Contact your loan officer or call First Access at 12345678.

first access

Mobile phone records

Information captured when you use your phone. Examples include:

- ✓ Phone calls
- ✓ Airtime top-up
- ✓ Mobile money
- ✓ Texts
- ✓ Bill pay 17

How we keep your mobile data safe

First Access will *never* share your personal information with anyone.

First Access will *never* read your text messages or hear your calls.

Never send First Access PIN or bank details. We will never ask for that information.

Thirty-eight respondents cited “nothing” as being difficult to understand, while one each cited the following aspects not directly discussed on the Fact Sheet:

- Will they still have to go to the branch to borrow?
- What will happen if they have two SIM cards?
- Will their phone usage be the method of repayment?
- Will this ease the loan application process?

VI. Conclusion

The experience of CGAP and First Access in testing informed consent provided useful lessons for the specific services First Access offers, as well as broader initial lessons for how to design effective informed-consent approaches for mobile credit scoring and other uses of consumers’ digital footprints for responsible financial inclusion.

The research team’s experience using two simple, low-cost and low-resource consumer interview and consumer testing methods shows that improving on current standards of informed consent can be achieved in a short time frame. As such, it is the research team’s hope that other providers will use these methods to develop informed consent approaches that reflect what consumers care most about in data privacy and protection, and inform educational efforts to raise awareness with consumers on the value and role of their digital footprints to increased access to financial services that match their needs. This process was also conducted in an iterative manner, which allowed for exploring broader concepts of privacy and security to understand local cultural context, leading to a series of hypotheses on key information to convey to consumers, and finally the testing of actual messaging and information to be used during the informed consent process.

With regard to the specific design and messaging insights for informed consent when using consumers’ mobile data records, several key lessons stand out from the consumer testing:

- **Consumers are more concerned with the way their information is used as they are with the privacy of their information.** While consumers expressed concerns with the privacy of their information, ultimately they were willing to accept data-sharing arrangements if it meant they gained easier access to a loan. Given that some consumers do not use self-protection measures in other aspects of their mobile phone usage (e.g., they share their PINs with agents), it may be useful to inform consumers of good practices that can help them ensure their identity is not compromised—for example, one of the messages tested informed consumers that they should never send First Access any account or personal details.
- **Consumers can gain a basic understanding of concepts of data privacy and credit scoring through simple messages.** Participants reacted positively to the messages, and appreciated the information provided. Their reactions and interest also opened the door for further information and education for those consumers who express an interest to learn more.
- **After the first SMS message, most consumers requested more information, suggesting a single message may not be sufficient for consumers to understand how their mobile data will be**

used. Therefore, supplementary information, such as the additional SMS messages, printed fact sheets, loan officer training, and phone number for more information, will play important roles in both informing consumers and increasing acceptance of the use of mobile records. In this way, informed-consent approaches could be used not only for authorization, but to initiate an ongoing educational discussion with consumers about their mobile and personal data history and credit scoring processes. SMS channels offer a low-cost, personalized channel for such message delivery, and should be tested further to determine their effectiveness in educating consumers.

- The fact sheet was designed both to inform consumers and steer conversations loan officers may have with them. However, **neither the fact sheet nor the other information sources tested here address problems of illiteracy on their own.** Training loan officers to explain the First Access process and privacy issues could offset the inability to read information provided via SMS or printed pamphlet, and the high response rate to the contact information means that call centers will be another important tool to clarify misconceptions and provide oral explanation.
- **Data usage and data privacy are interlinked in consumers' understanding of the process.** While the SMS messages were intended to independently address data usage and then data protection, participants' feedback demonstrated links between the two topics. Perhaps it would be better to present these two concepts side by side to help consumers understand both the credit scoring process and the protections put in place during the process.
- **How will informed consent differ with more complicated data usage arrangements?** A final consideration for further research is the additional challenges that will arise in cases where the financial service provider is also the holder of the data, and its intention is to use the data for multiple purposes over a longer period of time. First Access' model creates a clear, one-time consent for a specific transaction and purpose. This closed process is simple and limits risk of misuse of consumer data or things such as on-selling to third parties of this data. However, in cases where providers are seeking broader, more lenient authorization to use consumers' data, more complex issues of informed consent and consumer understanding may arise.