Information Availability & Capability

Digital literacy

This barrier refers to the ability to interact with, use, and navigate digital platforms and devices. In the DFS context, we specifically consider a customer's ability to use a mobile phone (feature or smartphone) and to navigate through USSD menus or smartphone apps.

Why is this barrier important?

Women without financial accounts and with low digital skills levels were often distrustful of DFS, which prevented them from adopting digital tools such as mobile money accounts. Research also shows that women who do have accounts, but have low levels of digital literacy, required assistance to use the digital product. Low levels of digital literacy also came up as an issue for entrepreneurs seeking to use online platforms. Evidence showed that MSMEs sometimes struggled to understand the value of digital platforms due to low levels of digital literacy. In response, many RCTs introduced digital skills training across segments potentially signifying that the importance of focusing on the *Digital literacy* barrier.

Connected Barriers

Prerequisites
Phone/SIM ownership
Internet/mobile connectivity

Social Norms
All barriers in this category

Information Availability & Capability
Unclear or unavailable info about products/uses
Financial literacy
Lack of peers/family/network who use DFS
Unclear or difficult process to open account
Basic literacy and numeracy

Product & Service Quality
Navigability of user interface of the digital product
Lack of products that meet women's needs

Cost
Non-transparent fee structures / hidden costs

Consumer Protection
Over-charging
Frauds and scams
Fear of making mistakes
Online/phone/social media harassment
Difficulty resolving complaints
Potential (or actual) privacy violations

Most Relevant Segments

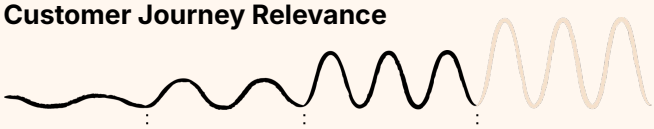
1 Excluded, marginalized

2 Excluded, high potential

3 Included, underserved

4 Included, Not underserved

Customer Journey Relevance



Phase 1: Account Ownership

Phase 2: Basic Account Usage

Phase 3: Active Account Usage

Phase 4: Economic Empowerment

Key evidence relevant to this barrier

- For survey respondents across 15 LMIC countries, literacy and digital skills ranked second in the top four barriers to mobile phone ownership for both men and women (GSMA, 2019).

- "Many MSME entrepreneurs cannot intuitively appreciate the benefits or value proposition of the use of digital technologies. They struggle to trust, navigate, and use technology to market their products and services, receive payments, and access digital financial services. Carefully designed and delivered digital skilling programs based on an understanding of their mental models can enable MSMEs to use digital technology to grow their businesses." (MSC, 2021).

- A study of women's participation in the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) work program in India shows that women who received a bank account, and the training to directly deposit earnings into that account were more likely to engage in the labor market than those without direct deposit. Direct deposits and training enabled women whose husbands followed gender norms (those that constrain women) to improve their labor force participation compared to women in similar gender norm contexts without direct deposit access (Field et al., 2016).
- A study (ADB, 2020) comparing digital and financial literacy across several countries in South Asia and Sub Saharan Africa found that:

  "**Digital literacy is a major driver of positive financial behavior, and may matter even more than financial literacy, especially in Sub-Saharan Africa which has seen a rapid expansion in DFS and mobile money services**... Specifically, a one-unit increase in the financial and digital literacy indices increases the likelihood of currently saving by 2.33 and 3.26 percentage points, respectively. In addition, the likelihood of saving with a bank increases by 2.07 and 2.35 percentage—points, respectively. In terms of economic significance, the probability of formal saving increases by 6.9% for a one-unit increase in the financial literacy index, and by 7.8% for a digital literacy increment... Increases in financial and digital literacy levels are associated with increases in borrowing, both formally and informally... In addition, the marginal effects for digital literacy are larger than those for financial literacy for each of the behaviors. **The findings suggest the need for greater emphasis on digital literacy when designing financial literacy strategies and programs. Moreover, the results hint at the potential of digital literacy to surpass financial literacy by providing a more efficient and less costly tool to stimulate financial behaviors that build resilience, precisely in settings where DFS are developing.**"

- "Women usually require 5 to 10 interactions on average compared to 3 to 5 for men before they are confident to use the service and initiate transactions." (GSMA, 2014).

The following Exemplar represents one evidence-based interventions that has shown success in addressing this particular barrier. There may be other Exemplars for this barrier in the larger Barriers & Exemplars Analysis compendium deck.

Exemplar

Digitizing Rural Women's Savings Groups in Tanzania

"Digitizing savings groups—that is, introducing the use of mobile technology to provide support, access to formal accounts, or information to members—holds promise to improve members' experience and reduce group meeting times and errors in record-keeping. This research provides some of the first insights into these possibilities among savings groups. It examines whether a digital savings ledger impacts group meeting length, financial capability of each group member, trust, and social cohesion within the group." (Arnold, 2020).

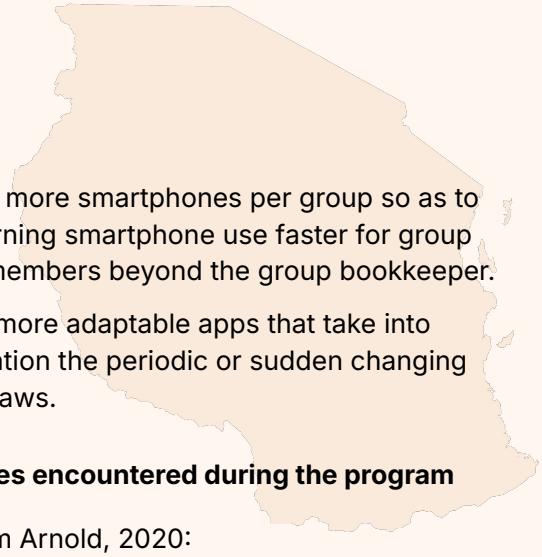
For eight months between July 2019 and February 2020, Project Concern International (PCI), together with DreamSave, provided smartphones, a monthly data plan, and a digital ledger application to 13 savings groups composed of 10-25 members each—70% of whom are women—in the Mara region of rural Tanzania. The program's goal was to understand the impact of digital savings ledgers on women's savings groups. It tested the impact of a mobile phone on group dynamics and whether a mobile app improves savings group functioning with PCI's Women Empowered savings groups.

Key Activities

- A total of six existing savings groups were selected ("paper-to-digital") and seven new groups were created ("born digital") to test the DreamSave App. During the program's timeline, groups used DreamSave to conduct group savings activities.
- Each group was provided with a "smartphone to mitigate any bias from only working with groups that had access to a group smartphone." (Arnold, 2020).
- Savings groups were provided with training on the use of the DreamSave app from PCI staff.
- Baseline and endline data collection via surveys with savings group members and review of DreamSave app data.
- DreamSave uses savings goals and SMS reminders to encourage savings contributions and loan repayments.

Outcomes/results

- The introduction of a group smartphone increased members' curiosity about using this technology for other purposes. Members from both existing and new groups reported—spending time outside of their savings groups learning how to navigate both the phone and the app, thus increasing digital literacy and capability.
- "By automating calculations for loan repayments, fines, and savings balances, DreamSave reduced time spent on financial transactions from 2.5-3 hours to 30-60 minutes. Members from both paper-to-digital and born digital groups reported positive feedback on the time savings." (Arnold, 2020).
- DreamSave app data revealed that 25% of "paper-to-digital" groups and 50% of "born digital" groups' loans were repaid before the due date.
- "DreamSave [in-app goals] and SMS reminders resulted in a significant increase in group discipline and members' ability to know how much they need to save to reach their goal." (Arnold, 2020).



Key enabling environment factors for intervention

- Offline functionality of the DreamSave app made it possible for savings groups to enter data without seeking an area with connectivity.
- Willingness of savings groups to participate in testing/use of a digital savings ledger.

Key design elements and principles that led to successful outcomes

- "Purposely selected a population that would be difficult to reach and less familiar with smartphone technology to test what needs to ultimately be considered when digitizing rural savings groups." (Arnold, 2020).
- DreamSave's "goal setting" feature significantly improved members' ability to know how much they need to save to reach their goal. "Women in new groups and existing groups reported a 50% and 70% increase, respectively, in knowing how much they needed to save for a specific goal." (Arnold, 2020).
- The use of SMS reminders played an important role in increasing loan repayment discipline. GIFs, videos and stars to reward groups when reaching savings goals was popular among members as well.
- The introduction of group smartphones to all groups sampled was important in sparking interest in use and discovery of new technology.

Potential for scale/replicability

Organizations and providers can develop similar apps with notification and SMS capabilities – though, consideration should be made for women using shared household phone numbers by providing information on the implications of SMS reminders and how that information might be shared with other household members who use the same phone.

Organizations that conduct training of trainers and digitize women's savings groups can ensure that women have more access and exposure to smartphones by introducing group smartphones. This can contribute to growing their trust in digital tools and technology.

Providing more smartphones per group so as to make learning smartphone use faster for group savings members beyond the group bookkeeper.

Creating more adaptable apps that take into consideration the periodic or sudden changing group bylaws.

Challenges encountered during the program

Cited from Arnold, 2020:

"Recruitment for the digital savings groups was challenging. One community facilitator (CF) for born digital groups reported that finding individuals to form a digital savings group took nearly twice as long as usual because when community members discovered they would be using a smartphone-based ledger some opted not to sign up."

"A key—and popular—feature of DreamSave was the SMS reminders sent to individual members' phones. Members have the option to include a mobile phone number if they want to receive SMS messages with personalized meeting summaries, transaction receipts, and loan reminders. While these SMS messages are optional and the app explains that personal financial information will be sent to these numbers if they activate that feature, these implications were not well communicated and explained during training. For women whose primary phone was a shared household phone, the risk of entering this number was not well understood. These women did not anticipate their husbands' receiving the savings information, and when it came time for share-out this posed a problem. When one woman asked the bookkeeper to stop sending the messages to her husband, the husband received an SMS telling him that the notifications had been turned off and he became angry. It is common for women to save privately, away from their husbands and other household members. Further training is needed to prevent such unintended consequences in the future."

Communication challenges with groups in remote areas delayed necessary updates/adaptations to the DreamSave app.

The unique practices and cultures of the savings groups were not reflected in the DreamSave app. Though DreamSave deliberately decided not to—

—pre-adapt the app, members mentioned some challenges in the use of the app given their particular practices.

Recommendations from the research

"One of the key takeaways for savings group practitioners is that trainers need to be careful to educate members during setup of a new digital app so all members are aware of the settings and can make their own choices." (Arnold, 2020).

As implementers "expand digitization of savings groups, adequate investment in digital literacy training—including identifying individuals with smartphone experience as community 'champions'—will be essential to successful expansion." (Arnold, 2020).

"Future expansion of DreamSave [or other digital savings ledgers] in rural areas with limited technology exposure will require more robust community engagement prior to the pilot to address the larger questions of trust and level of experience with digital technology..." (Arnold, 2020).

Additional Exemplars

Mobile Money Cash Transfer Experiment in Niger

Mobile Phone and Livelihoods of Women Project

Comunidades Conectadas y Hogares Conectados

Aligning Libraries And USAFs For Rural Public Access

Kenya's Rules on Mobile Money Price Transparency Are Paying Off

Regulations Drive Success of Digital Finance in Côte d'Ivoire

Business Women Connect Program

Mobile Financial Services for Female Entrepreneurs (MFS) Program

Reducing Bank Overdraft Usage through Price Discounts and SMS Reminders

Digitizing payroll for factory workers in Bangladesh

Digital Wallet Adoption for the Oral Segment in India