Savings and Loans Access Strengthened Through Digitized Accounting

Digital Book-keeping App Enhances Accuracy, Trust, and Efficiency for Savings Groups

Research Overview

In six African countries and Colombia, between April and October 2024, Opportunity piloted the DreamSave app for "digitizing" the financial records of savings groups. To facilitate financial inclusion for marginalized and low-income populations, Opportunity helps farmers and entrepreneurs to form and operate informal savings and loan groups. Book-keeping for these groups can be time consuming and plagued by inaccuracy, which leads to mistrust and inhibits saving activity and access to loans. With the DreamSave app, leaders enter their group's transactions into a smartphone and the app calculates account balances, enhancing accuracy, efficiency, and trust in the group. The DreamSave system also enables Opportunity to access savings group records electronically. Ultimately, it is designed to facilitate group access to formal finance. In the pilot program, in 2024, Opportunity introduced DreamSave to 749 groups with 16,420 members (70% female).

Key Conclusions

The following conclusions emerged from a survey and focus group discussions with members of groups using DreamSave:

1. **Satisfaction with record keeping – high, moderately improved:** The vast majority, 96%, of members were satisfied with their group's record keeping using DreamSave, a modest increase of 6 percentage points over their previous practices.
2. **Group cohesion – strong and improving:** With the use of DreamSave, the portion of members experiencing frequent disputes over financial records declined by 14 percentage points to 29%.
3. **Operational efficiency – DreamSave saves time:** Most members, 65%, experienced shorter meeting times. The portion of members that felt their meetings times were too long declined by a substantial 26 percentage points, from 48% to 22%.
4. **Challenges in using DreamSave – cost and connectivity:** The main challenges facing groups adopting DreamSave were the cost of data/airtime, for 43% of members, and connectivity to back-up their data, 31%.
5. **Willingness to pay – high and increasing:** Participants' willingness to pay for the smartphone and connectivity costs was high, 90%, having increased substantially once members had the opportunity to use DreamSave, by 21 percentage points.

Although labor-intensive to introduce, DreamSave provides a good and efficient system for Opportunity staff to monitor, support, and report on savings groups, and DreamSave shows potential as a tool for linking groups to formal finance.

Next Steps

Opportunity plans to further test the DreamSave app to systematize dissemination, addressing operational challenges, and to pilot the use of the DreamSave system for linking savings groups to formal financial services, especially loans to expand the funds available for members to borrow, particularly during peak demand times such as the planting season.

RESEARCH CONTEXT

Opportunity's Work to Enhance Financial Inclusion Through Savings Groups. Opportunity International (Opportunity) provides financial soltions and training to empower people living in poverty to transform their lives, their children's futures, and their communities. As Opportunity strives to eliminate extreme poverty, Opportunity strengthens informal finance, which is more accessible than formal finance for lower income, less educated, rural, and otherwise marginalized populations. The main tool Opportunity uses for informal finance is savings groups, which are informal community "banks" with around 30 members each. Opportunity forms and strengthens these savings groups in multiple contexts, including those in which Opportunity piloted the DreamSave app: the Agricultural Finance Program (AgFinance) in the Democratic Republic of Congo (DRC), Ghana, Nigeria, Malawi, Rwanda, and Uganda; programs facilitating financial inclusion for people with disabilities and refugees in Uganda; and, financial inclusion for urban entrepreneurs, many of whom are internally displaced people or refugees, in low-income and informal settlements in Cartagena, a city in northern Colombia.

The Value and Challenges of Savings Groups. Savings groups provide financially excluded populations with vital access to savings and loans, but the groups face challenges with record keeping and low capital, challenges that inhibit their sustainability and effectiveness in delivering high-impact loans. Through savings groups, members meet and save regularly and then borrow from that pool of savings, paying interest. Generally, at the end of each year, the groups "share-out" their funds such that savers earn interest. These transactions are recorded in a group ledger, and in

individual passbooks. The members in groups that Opportunity serves are low-income, and often have low or no literacy. For them, accurate calculations and record-keeping can be a challenge. Record-keeping is time consuming, taking up most of meeting times, which average around an hour and 25 minutes. Inaccurate records lead to disputes and accusations of fraud. Fraud, or the appearance of it, reduces trust in the groups and inhibits savings, thus limiting member access to vital loans to grow their businesses and invest in their farms. Even when records are well kept, savings group members often need more loan capital than is available in the group fund, particularly at peak times when multiple members want to borrow at the same time – during planting season for example. Groups would like access to formal finance to expand their loan fund, but weak record-keeping is a barrier. In addition, it is costly for financial institution staff to travel to savings groups on a regular basis for monitoring. Thus, Opportunity staff spend substantial time training members, troubleshooting records, and linking groups to formal finance. ♦

OPPORTUNITY'S DISSEMINATION OF THE DREAMSAVE SOLUTION

The DreamSave Solution. The DreamSave app, from DreamStart Labs, was designed to address these record-keeping challenges in order to strengthen savings groups, expand their savings and loan activity, facilitate monitoring and support by organizations like Opportunity, and link groups to formal finance. DreamSave is an app operated from smartphones that enables savings groups to enter their transactions. The app then immediately calculates individual and group balances, sending members SMS confirmation messages which enable members to hold leaders accountable. In addition, groups upload their data to a central platform as a back-up. The platform, DreamSave Insights, generates a dashboard so that the data can be used by program managers to monitor, support, and report on savings group results. With permission from group members, financial institutions could be given access to this data for loan appraisal and monitoring.

Opportunity's Dissemination of DreamSave. During this pilot, Opportunity helped savings groups adopt and use DreamSave, and tested DreamSave's effectiveness as a monitoring tool. To use DreamSave, groups need a smartphone, cellular connectivity, and training. DreamStart Labs trained Opportunity staff in the use of the app, and in the use of the central platform. Opportunity then transferred DreamSave to savings groups – helping groups download DreamSave and training them to use it. In the AgFinance and financial inclusion programs in Africa, Opportunity provided a free smartphone, a temporary intervention to enable groups to test the app. In Colombia, most members have smartphones, and so groups selected a leader who had DreamSave loaded onto their phone. Altogether, Opportunity

Group Leaders Learn to Use DreamSave
Malawi

introduced DreamSave to 749 groups across 16,420 members. Once groups were trained, Opportunity used the DreamSave Insights to identify struggling groups or field staff and agents for follow-up. They also used DreanSave Insights data to report progress to funders. ♦

RESULTS FROM THE PILOT TEST

Research Methods. Opportunity conducted an evaluation of the DreamSave pilot in October, 2024. Data on the performance of DreamSave came from multiple sources:

- **User and member feedback:** a sample survey of leaders and members, along with focus group discussions.
- **DreamSave Insights:** an analysis of data uploaded by groups.
- **Opportunity Staff and DreamStart Labs reflections:** Implementing staff, program leaders, and both Opportunity and DreamStart Labs technical advisors shared their perspectives on the effectiveness of the app in meeting objectives for clients and for Opportunity staff, and on challenges and solutions.

The surveys were conducted in Colombia, DRC, Ghana, Malawi, and Uganda. Researchers conducted interviews of 997 members, 39% of whom were leaders using the app, 61% regular members, and 69% women.

Results for Savings Groups. DreamSave was appreciated by savings group members for the key reasons behind the introduction of the app – it supported more accurate records, enhanced group trust, and saved time. The main challenge that many savings groups faced in using DreamSave revolved around their ability to connect to the internet to upload their data in order to have a back-up for their records and to report their activity to Opportunity.

- **Satisfaction with Record keeping – high, moderately improved:** The vast majority of members, 96%, were satisfied with digital record keeping, a 6 percentage point increase over their satisfaction with manual practices. A large majority, 93%, were also satisfied with how DreamSave handled loan processing, an increase of 7 percentage points.
- **Group cohesion – strong and improving substantially:** Overall confidence in group management increased by 7 percentage points with the use of DreamSave, from 86% to 93% of members being confident in group

management. With the use of DreamSave, the proportion of participants experiencing frequent disputes over financial records declined by 14 percentage points, from 43% to 29%.

- **Operational efficiency – shorter meetings, improved use of time:** The average meeting times decreased by 17 minutes from 84 minutes to 67 minutes, not a huge shift. The explanation is that members used meeting time differently. As the time spent on book-keeping decreased, members appreciated that more meeting time could now be spent on other, more meaningful activities. They enjoy their meetings more. The proportion of members that felt their meeting times were too long declined by a substantial 26 percentage points, from 48% to 22%.

> "The app has necessitated that our weekly meeting is conducted within the shortest possible time frame. We have ample time to discuss important matters that affect our group. At the same time, we have room to attend to other issues, and this is contrary to what we used to do previously. Previously, we used to spend a lot of time discussing issues and recording data manually with which we could spend a lot time, letting other equally important matters that need our attention as well suffocate in the process. Now, with this app, there is great improvement on how we manage time."
>
> *– Member testimony, Malawi*

> "We used to have miscalculations and there would be misunderstandings between group members and the executives. In most cases, members would think leaders are stealing from them even when it was just a mistake. The app has automated calculations. No more errors." *– Member testimony, Uganda*

> "I was skeptical at first, thinking it would be difficult or could lead to problems, but now I see that it's actually helping our group move forward."
>
> *– Member testimony, Malawi*

- **Challenges – cost, connectivity, adoption:** The main challenges facing groups adopting DreamSave were the cost of data/airtime, 43%, and unreliable or no connectivity to back-up their data to the central platform, 31%. Around one third of participants reported no challenges in adopting DreamSave.

Results for Managers and Staff. Overall, managers and staff found DreamSave to be an effective tool for monitoring, supporting, and reporting on savings group work. For example, staff used the DreamSave central platform to identify and follow-up with groups that had failed to upload their data in a timely manner. Managers used the data from the central platform to check on implementation progress and to generate donor reports. In general, the data quality is reliable with a few exceptions that arose from the first groups to enter data into the system. In addition, due to lack of connectivity or investment in airtime to back-up data, only 66% of groups uploaded their data on-time. With these limitations, Opportunity does have, for the first time, an overview of its savings group portfolio (see text box, "Opportunity Savings Group Portfolio Data"). The main challenge for managers, staff, and field agents implementing the DreamSave pilot was the capacity, in person-hours and technical expertise, to integrate DreamSave dissemination into mainstream program work. ♦

> **Opportunity Savings Group Portfolio Data**
> - **Groups with data uploaded on-time.** 66%
> - **Savings groups served.** 749 groups with 16,420 members, 70% female.
> - **Member engagement.** Attendance is 75.8% and the drop-out rate is 1.4%.
> - **Members meeting savings goals.** 29.2% making great progress, 66% only a little behind their goals.
> - **Savings.** Cumulative $866,874 (excluding outliers); $1,170/member.
> - **Borrowing.** 55.1% have taken loans, at a value of $893,730. Portfolio at risk is 0.
> - **Social fund.** 4.7% utilization rate, with an average payout of $3.16 per person.
>
> *DreamSave Insights*
> *October, 2024*

PROSPECTS FOR SCALE-UP

Member Attitude Toward Digital Technology. Before using DreamSave, around half of members had significant concerns about using digital technology for their group's record keeping. Members confused DreamSave with mobile money, expressing fears about being ripped off in some way, their personal data being stolen, and not being able to use the technology correctly. Once groups understood and started using DreamSave, and were assured of data privacy by Opportunity, these concerns evaporated. The proportion of members with concerns and fears about digitization declined by 11 percentage points down to 39%. Now, members are more concerned about connectivity to back-up their data and whether DreamSave will be available in the long run. The implications for scale-up are:

- **Marketing will require education:** Marketing DreamSave will require awareness-raising about the nature and benefits of the DreamSave app.
- **Data privacy assurance:** Marketing DreamSave will also require assurances that data will be secure.

Addressing the Challenge of Connectivity. Given limited connectivity in some areas where Opportunity serves savings groups, outreach will have to be adjusted during any scale-up. Firstly, Opportunity will have to limit outreach to locations where groups can reasonably expect to access the internet. Secondly, promotional efforts will have to inform groups of the need for connectivity and potentially include the cost of transportation to reach connected locations in any estimates of the cost of using DreamSave.

Willingness and Ability to Pay for Phones and Operating Costs. Adopting and using DreamSave involves the up-front cost of a smart-phone, for groups without access to a phone, and the cost of airtime/data to send SMS messages to members and to synchronize data. Generally, members are willing and somewhat able to pay.

Even before using DreamSave, 74% of members were willing to contribute to operating costs and 69% for a group phone. This increased by 15 percentage points to 89% and 90% respectively with DreamSave use. A majority of members, 64%, contributed on average $300 per group per year, which is just about enough to purchase a phone and pay for operating costs, depending on the context. This data suggests that some groups may be able to afford a phone and expenses fairly easily, but other groups may struggle to afford DreamSave. It also suggests that new groups may need exposure to DreamSave and/or strong marketing to agree to pay up-front for a phone simply to digitize their accounts. Members suggested that it would be easier to manage the cost of operations if the expense were announced and planned for at the beginning of their savings cycle, which often occurs in January of each year. The implications for scale-up are the following:

- Groups may need financing to procure phones, and some groups may need subsidies.
- Groups would benefit from negotiating reasonable prices for appropriate phones and airtime/data costs.
- A concerted marketing effort will be needed, and marketing information will need to include local estimates of the cost of operating DreamSave to help groups decide whether to invest, and how to manage costs.
- There may be higher demand for phone financing and for support to adopt DreamSave in January, which could cause training delivery bottlenecks.

Managing DreamSave Dissemination and Operations. Integrating DreamSave at scale into savings group programs will require additional person-power and leadership with sufficient technical expertise. ♦

Below: Savings group conducts and records savings using DreamSave
Right: Member receives SMS confirmation of her savings deposit on her simple phone.
Malawi

Smartphone with DreamSave App

Basic phone receiving sms confirmation messages
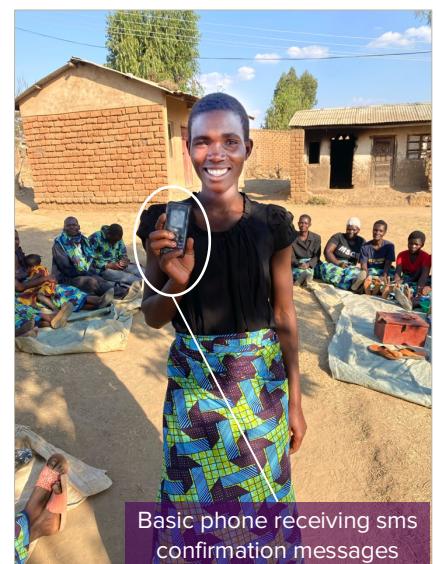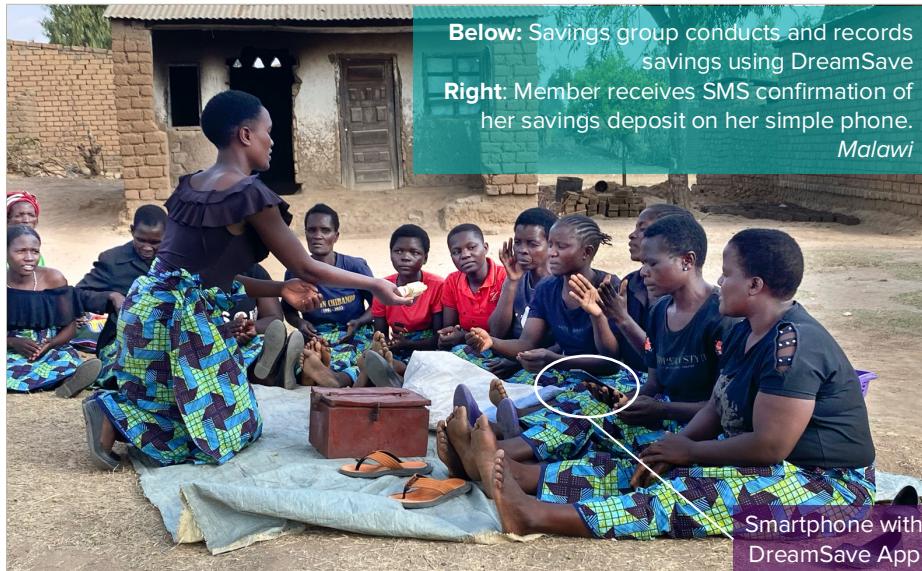
NEXT STEPS

Piloting Scale-up Strategies for DreamSave. Opportunity plans to conduct limited scale-up of DreamSave dissemination while testing adjusted marketing and outreach strategies, market-based phone procurement and financing, and operational time and cost management.

Testing Linkages to Formal Financial Institutions. In the next phase of DreamSave adoption, Opportunity plans to test the use of DreamSave for facilitating savings group access to formal finance. ♦

Saving group client
Malawi

This study shows Opportunity's strengths in –
- **Linking clients with digital solutions** – Using technology to solve client challenges and enhance financial access.
- **Collaborative partnerships** – Collaborating with leading technology firms.
- **Pilot program research** – Demonstrating the capacity to quickly capture, analyze, and use research findings.
- **Financial inclusion for people living in extreme poverty** – Using all solutions at hand for financial inclusion of more marginalized populations.