By: DreamStart Labs
In collaboration with PCI, a Global Communities Partner, and ICRW

Introduction

This document is one of three research briefs that highlight key insights from a study of Digital Savings Groups conducted in rural Tanzania from August 2019 through February 2020. The research was conducted by the International Center for Research on Women (ICRW) working with savings groups supported by PCI, a Global Communities Partner, and their Women Empowered (WE) program. The study followed two sets of WE savings groups that used the DreamSave app from DreamStart Labs. The first set of groups were mature savings groups that had been recording transactions on paper for multiple years, then switched to DreamSave ("Paper-to-Digital"). The second set of groups learned the savings group model using the app from the beginning ("Born Digital"). This study was conducted in the Mara region of Tanzania, an extremely rural area with high poverty, low literacy, and limited experience with mobile technology.
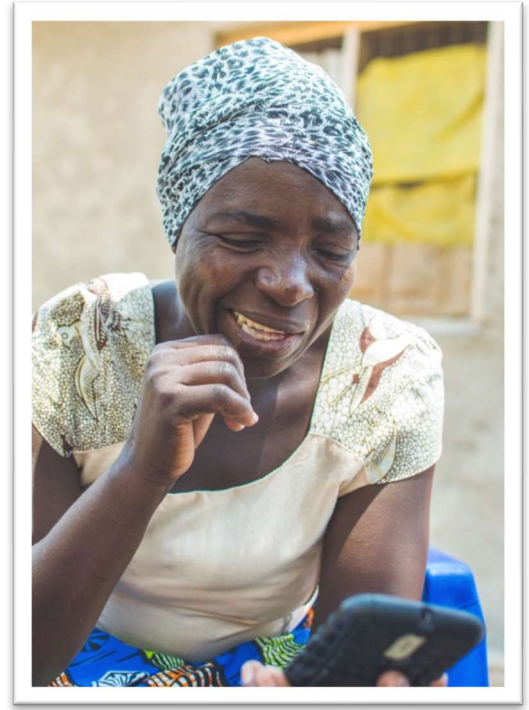
Going Digital: New vs Existing Groups

One of the key questions going into this study was how "Born Digital" (BD) groups would perform with DreamSave, and how this would compare with mature "Paper-to-Digital" (PTD) groups that transitioned to the app after years of using paper ledgers. In many ways, the task of **Born Digital** groups seemed **more challenging** than that of existing groups. On top of adopting a new technology, they also had to learn the entire savings group methodology for the first time. And they had to learn everything with a newly formed group that had yet to establish trust and social cohesion between members.

Paper-to-Digital groups, by contrast, seemed to have a number of **potential advantages** when moving to digital. These existing groups already understood the savings group methodology, had been through multiple cycles together, and had a well-established cadence of social dynamics between group members. When they adopted DreamSave, the primary new thing they had to learn was the technology itself.

One of the goals of this study was to measure the impact of digitization on factors such as meeting efficiency, accuracy of records, financial capability of members, and gender dynamics – and to see if Born Digital groups could achieve similar outcomes to mature groups without negatively impacting social cohesion.

This brief will compare some of the key findings from these two sets of groups and offer recommendations for organizations considering digital technology for rural savings groups.

Born Digital Groups Achieved Similar Benefits as Mature Groups

One of the significant takeaways from this study is that Born Digital groups achieved similar benefits as mature groups when adopting DreamSave, and in some cases the new groups actually performed better than existing groups. Key findings include:

- Born Digital and Paper-to-Digital groups **both achieved significant time** savings from using DreamSave. Meetings that averaged up to 2.5 hours before DreamSave, dropped to just 48 minutes for Born Digital groups, and 54 minutes for Paper-to-Digital groups.[1] The two types of groups also had similar responses when asked how much time they spent on financial transactions while using DreamSave. Members of Paper-to-Digital groups who spent "a lot" of time on transactions **dropped from 44% at the baseline to 6% after switching to DreamSave**, compared with a similarly low **12% of Born Digital** group members who reported spending a lot of time on transactions.[2]
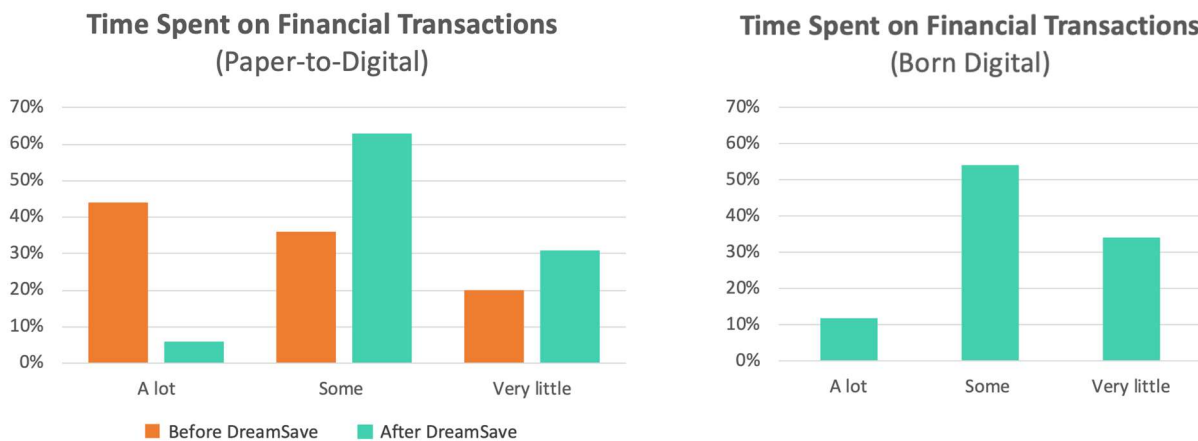
- Attendance remained strong in both types of groups after digitizing. Born Digital and Paper-to-Digital groups had an identical 5 percent absentee rate while using DreamSave during the study period. DreamSave includes multiple nudges and incentives for encourage consistent attendance, so these may have played a role across both new and existing groups.

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1 Estimated meeting time of 2.5 hours before DreamSave is based on interviews with group members. Meeting times after DreamSave are based on data from the app that records meeting start and end times.
2 Survey data includes results of a baseline study conducted before the pilot, with an endline survey conducted after the groups had been using DreamSave for six months.
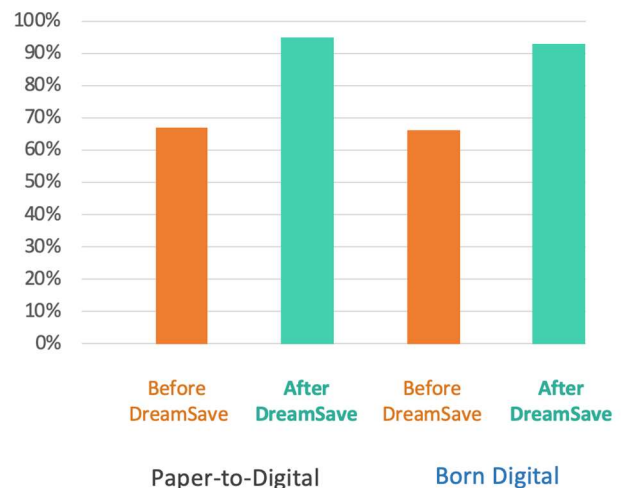
- Social cohesion remained strong for both types of groups after adopting DreamSave. Existing groups reported no loss of unity between members after digitizing, and even reported that the app reduced internal conflicts about financial transactions and policy enforcement. Born Digital groups similarly reported that the introduction of a digital ledger did not have any negative impact on members forming trusted bonds with each other.

- Members of new and existing groups both reported increased interest in smartphones after their groups started using DreamSave. Several members spent time outside of their savings groups to practice with the phone, and a few expressed interest in buying one for themselves. Implementers may be able to capitalize on this curiosity and enthusiasm to encourage digital literacy and capability.

- Born Digital and Paper-to-Digital groups both saw **similar increases in financial capability** during the study. At baseline, members were asked if they were saving for something specific, if they knew how much they needed to save to reach their goal, and if they knew their current savings. **Both existing groups and new groups reported similar** results of close to 100 percent on all three financial behaviors in the endline survey – a significant increase from baseline numbers in both group types. These increases may have been influenced by **behavioral feature**s in DreamSave that allow members to set and track goals, earn achievement awards for good progress, view estimated future earnings, and receive SMS nudge messages to encourage savings throughout the cycle.

I Know My Current Savings

Before DreamSave / After DreamSave — Paper-to-Digital
Before DreamSave / After DreamSave — Born Digital
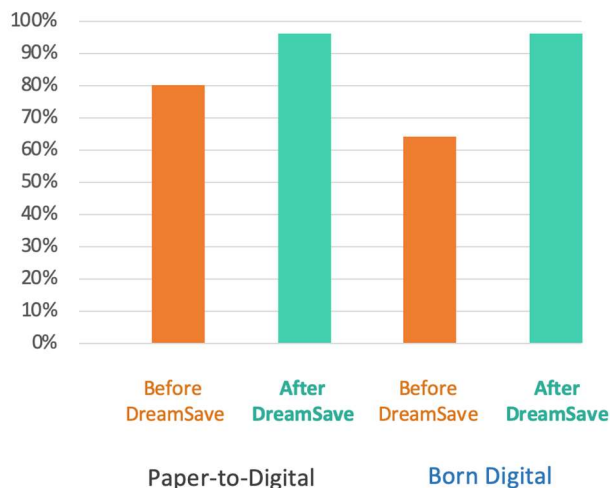
I Know How Much I Need to Save

Before DreamSave / After DreamSave — Paper-to-Digital
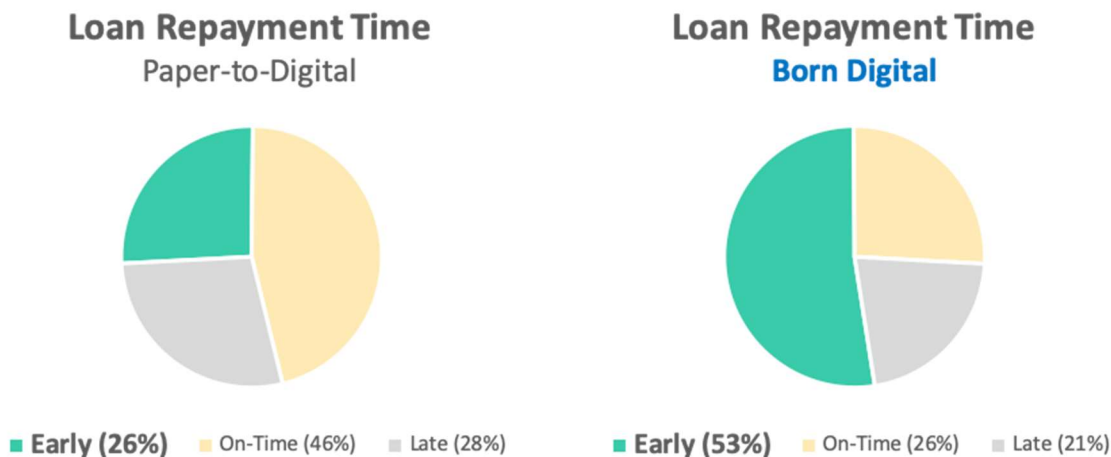Before DreamSave / After DreamSave — Born Digital

Born Digital Groups Repaid Loans Earlier

Timely loan repayments can play a key role in the financial success of savings groups. The earlier loans are repaid by members, the more times the same money can be loaned out to others during the cycle. While loan repayment timing is typically not tracked in paper-based groups, digital tools like DreamSave record this information automatically.

DreamSave includes several **nudges** to encourage positive behavior such as good attendance, consistent savings, and timely loan repayments. In the case of loan repayments, the simplest are in the form of **SMS loan reminders** sent to members automatically at the midpoint of their loan, and again as their due date approaches. In addition, members are awarded 10 Dream Stars for paying back a loan on time, and **15 stars for paying it back early**. These awards feature celebratory animation and sound effects designed to create positive peer recognition in front of the entire group.

The groups in this study used a one-time interest method assessed upfront on 3-month loans. Since there were no monthly interest charges, there was **no direct financial incentive** for members to repay loans early. Members in groups with this type of loan policy **typically wait until the due date to repay**. While this behavior complies with the group's loan policy, it is not always optimal for the group as it limits opportunities for other members to borrow and lowers the group's overall potential earnings from interest.

During the study period, Paper-to-Digital groups issued a total of 150 loans, of which **26% were paid back early**. With the Born Digital groups, the results were even more striking. Collectively, these groups issued 208 loans, of **which 52% were repaid before the due date**.[3]

Loan Repayment Time
Paper-to-Digital

■ Early (26%)   ■ On-Time (46%)   ■ Late (28%)

Loan Repayment Time
Born Digital

■ Early (53%)   ■ On-Time (26%)   ■ Late (21%)

While factors impacting timing of loan repayment were not examined in the study, it is unusual for groups with this loan policy to repay early, so a reasonable hypothesis is that the nudges, reminders, and behavioral incentives used by DreamSave played a role in encouraging early repayment across both types of groups. It is also reasonable to assume that Born Digital groups may be more responsive to nudges in the app.

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3 Loan repayment timing based on data from the DreamSave app that records and timestamps information on all financial transactions.

Recommendations

While additional studies are needed to better understand these dynamics, our initial findings suggest a few potential recommendations for organizations adopting digital savings group technologies.

1) **Consider Side-by-Side Pilots with Mature and Born Digital Groups**
Most digital savings group pilots focus on well-established paper-based groups moving to mobile for the first time. While this approach is logical, implementing organizations may want to consider incorporating a few Born Digital groups into their pilot strategies as well. **Comparing new and mature groups** can provide **additional insights** into the most effective best practices for future scale-out of digital solutions.

2) **Consider Adding "Digital Champions" to Rural Groups Adopting New Mobile Technologies**
Demographically, the groups in this study were very similar with one exception – **Born Digital** groups attracted a slightly higher ratio of **young members**. During the recruiting process, some older community members were nervous about joining a digital group. Younger members, by contrast, tended to be **more enthusiastic about trying something new**. It is reasonable to assume that having a few younger members in the Born Digital groups may have played a role in the favorable outcomes they achieved in this study. When starting new digital savings group projects, implementing organizations may want to considering adding a "Digital Champion" from the community to the project team. This new role is **typically younger**, may own her own smartphone, and is generally more comfortable with and curious about digital technology. She is an added resource to the group, supporting the existing bookkeepers and other group members as they gain familiarity and comfort with the digital technology. These positions are sometimes filled by the **daughter of an existing member**, which can also develop leadership skills of younger community members.

3) **Encourage all Members to Engage with Digital Apps on Shared Phones**
The positive outcomes experienced by Born Digital groups appear to be influenced in part by the awards, reminders, progress bars, and other behavioral methods built into the design of DreamSave. While some of these are in the form of award sounds the **entire group** can hear – or **personalized SMS messages** sent to each member privately – **others are only visible when members can see the screen of the shared smartphone.**
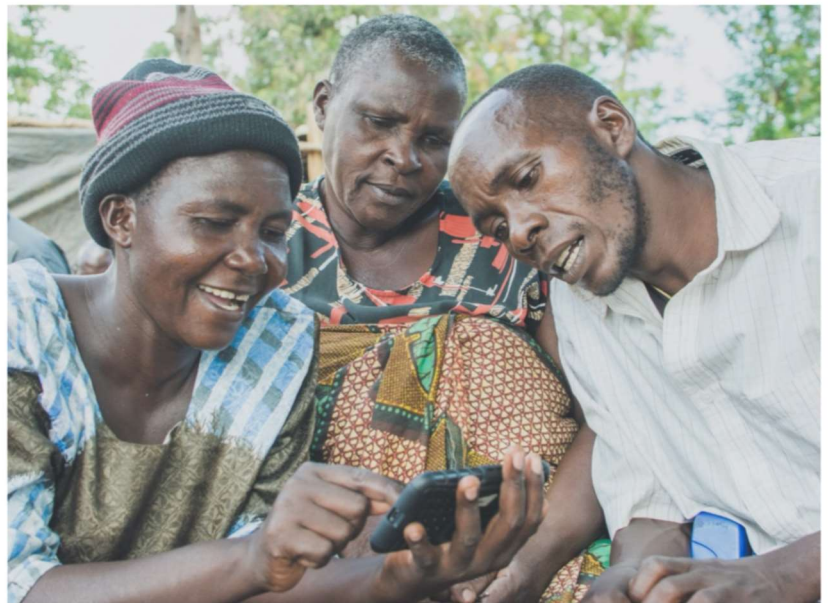
To take full advantage of this, implementing organizations should **consider encouraging participation of every member** when interacting with the **shared smartphone**. For example, in the Savings step DreamSave shows each member a visual reminder of what she is saving for, a colorful graphic indicating whether she is on pace to meet her goal, and a data-driven estimate of her personal shareout to improve financial planning.

In some groups, bookkeepers enter data for each member without showing them the screen. In others, officers share the screen with each member and even encourage members to enter their own savings or loan amounts in the app. This can take a little more time the first meeting or two, especially with low-literacy members who need extra encouragement and assistance, but the process can quickly become part of the group culture and lead to more engagement, improved mobile literacy, and better overall performance.

The full study report is scheduled for release in September 2020. In the meantime, be sure to check out the other study briefs which are out now:

- *Rethinking Key Roles in Digital Savings Groups*
- *The Impact of Gender in Digital Solutions for Savings Groups*