**Concept Note: Recipient Segmentation to assess DFS Readiness and Building DFS Capacity**

**September 22, 2022**

1. **Project Overview**

In parts of the world such as Sub-Saharan Africa, most of the government issued social protection cash transfer payments to vulnerable citizens occur in cash rather than digital payments. The costs and challenges associated with government to person (G2P) cash payments are well documented and can include security concerns (especially in conflict-prone areas), logistic challenges in transporting high volumes of cash, mobilizing recipients at central points and the risk of leakage / corruption. While digital payments offer a compelling alternative to improve efficiency and security / safety, digital payment infrastructures (e.g. agents, ATMs, point-of-sale terminals) may not be strong enough to support digitizing G2P transfers and ensure recipients can pay for things digitally.

However, this may not be the case for all recipients, as some live in more populated areas where payment infrastructures do exist and have an elevated level of digital capacity to manage their own account. This concept note proposes segmenting digital payment-ready recipients based on existing recipient registry data as well as issuing digital cash transfers to these recipients. Digital financial literacy training is a critical element to this concept note as is measuring the impact of the digitization after at least three payments rounds. Establishing a recipient segmentation strategy that uses existing national G2P registry data sources could 1) inform the key challenges and barriers faced by recipients in receiving digital payments, 2) offer suggestions for how G2P issuing organizations can prioritize and scale digital payments, 3) support the broadening of the local digital payment infrastructure through digital financial service (DFS) provider collaboration and 4) support digital financial literacy education through a dedicated curriculum. This can lead to recipients accessing and using these accounts to help manage their financial lives productively and confidently.

Following the segmentation, this concept note proposes issuing open-loop digital payments to the recipients most ready to receive digital payments. Open-loop payments are linked to the broader financial ecosystem and allow recipients to access a broader suite of financial services beyond the context of the cash transfer programme.

This concept note considers only segmentation for G2P payments, a separate concept note has been designed for humanitarian payments.

1. **Project activities**

Phase 1: Determine Geography

To narrow the potential recipient pool, the geography should first be selected prior to conducting the recipient segmentation. The geography will also inform which DFS providers are eligible to participate in the pilot given certain partners may have strengths in specific regions of a country. This first engagement with DFS providers can be used to 1) receive data points to determine the geography, 2) gauge their interest in participating in the pilot and 3) to communicate expectations for DFS providers around recipient registration, liquidity management, cash in-cash out agent presence and account troubleshooting. In determining the geography, the below indicators must be assessed:

**Table 1: Geography selection indicators**

| **Data Origination** | **Indicator** |
| --- | --- |
| G2P registry data (if available) | Access to basic education levels |
| Access to financial service points |
| DFS Providers | Existing DFS ecosystem including agent locations or bank branches |
| Existing merchant DFS ecosystem |
| Access to minimum 2G network connectivity |
| News articles / monitoring websites | Security / safety of location quantified by frequency of attacks |

**Phase 2: Analyze Relevant Data Points in Existing Databases**

In the second phase, the consortium will conduct an analysis of the existing types of information held on program recipients to determine where proxy data points for digital account readiness might exist. After matching existing data to the indicators available in national datasets or registries, an expanded list of relevant indicators can be developed based on the available dataset. Once the final list is developed, DFS providers should be engaged to receive feedback on the indicator list. After receiving feedback from the DFS providers, the final list of proxy indicators will be complete.

Phase 3: Segmentation Model Testing

Using the final indicator list, recipients in the selected geographies can then be scored based on the sample scoring criteria in Table 2 below, with 3 being the highest score and 1 being the lowest.

**Table 2: Digital Payment Readiness Scoring Criteria**

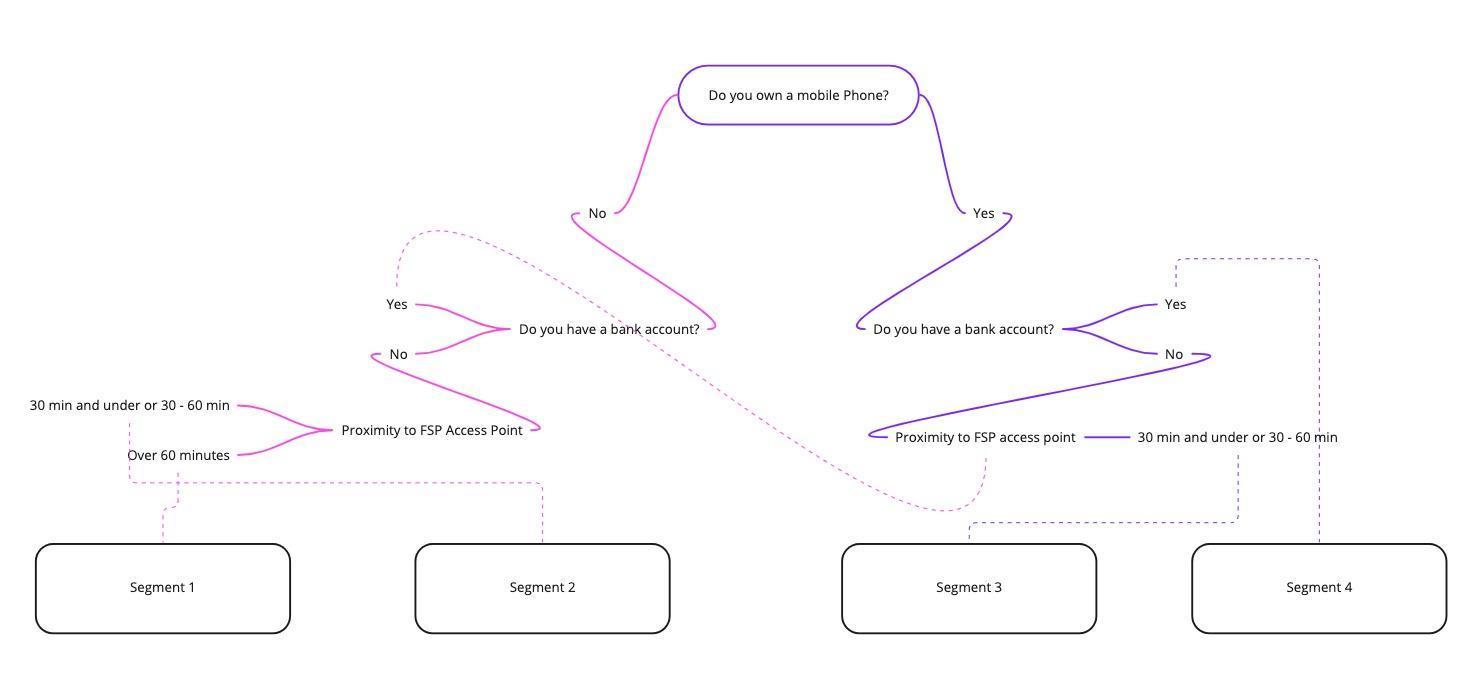
| **Indicator** | **Score of 3** | **Score of 2** | **Score of 1** |
| --- | --- | --- | --- |
| Mobile phone ownership | Yes | N/A | No |
| Account ownership | Full bank account | Other formal financial account | No account |
| Smartphone ownership | Yes | No | N/A |
| Electricity Source | Yes | No | N/A |
| Proximity to market centers | Under 20 minutes | Between 20-60 minutes | Over 1 hour |

The lowest score possible using this scoring criteria is 9; the highest is 24. Individuals that score between 20 - 24 are strong candidates for offering transactions directly to a DFS account and can be considered in the “ready now” category. Those that score between 13-19 could perhaps be ready for receiving funds into a DFS account, but may experience difficulties and can be considered as “ready with an intervention.” Any scores below 13 should not be considered as candidates at the moment, as it will likely be too difficult or irrelevant to their current situation. These candidates can be considered as “ready only with a large intervention.”

There are three primary ways to lift their score: 1) continue promoting the utility of mobile phones among program recipients (a rotating savings group or PayGo scheme could be explored), 2) coordinate with development programming that focuses on developing livelihoods (e.g., agriculture, SME development) to help improve the overall economic well being of recipients and 3) continue promoting the utility of digital finance accounts to program recipients.

An alternative segmentation methodology could also be tested, where a decision tree is established based on suggested criteria, including those examples above in Table 2. The decision tree structure would use the responses to each question in the registry as a decision point. For example, the first question could be whether they have bank accounts or not, followed by phone ownership, electricity source, and proximity to markets. This model would result in four different segments, segment 1 would represent those beneficiaries who are least ready for receiving their funds digitally, while segment 4 would represent those who are most ready. We would be able to look at the results of both segmentation models to make a final decision on which one results in the most accurate representation of recipients. See an example decision tree below.

Figure 1: Example of a decision tree for segmentation



**Phase 4: PSP Contracting**

After a series of engagements with DFS providers regarding this concept note, SIA recommends scoring DFS providers based on the following 10 indicators: 1) Technical Competence, 2) Experience with G2P issuing organization, 3) Geographical Coverage, 4) Years of Experience, 5) G2P Pilot Experience, 6) End User Chanel Options & Stage of Deployment, 7) License Category, 8) Current Payment Volumes, 9) Current Payment Values and 10) Agent Accessibility.

Once the segmentation model is complete, DFS providers should be contracted. Expectations should be communicated and agreed upon through amendments to existing contracting agreements. Once the DFS partner is contracted, the recipient list should be shared with the partner and arrangements should be made to centralize the recipients at a specific day and time for account registration and digital financial literacy training.

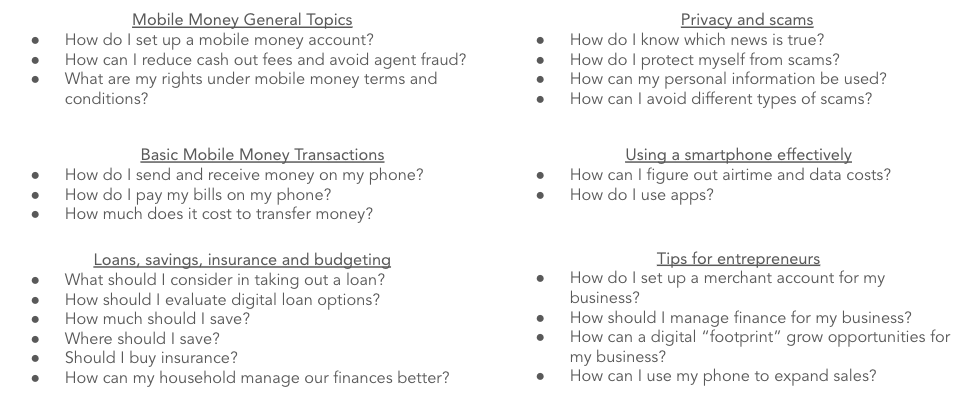
**Phase 5: Pilot Implementation**

Following the identified geography and pilot participants, the first part of pilot implementation will include registering recipients that do not yet have accounts with the selected DFS partner. During this registration, digital financial literacy training will be implemented collaboratively with the DFS partner to ensure recipients are comfortable using the wallet. A customized digital financial literacy curriculum will be developed according to the DFS wallet and the local context. SIA designed an open-sourced women-centered digital financial literacy campaign called [Hey Sister! Show me the Mobile Money](https://www.siaedge.com/show-me-the-mobile-money), from which elements can be incorporated and adapted to meet the G2P and PSP wallet context. Throughout the customization of the digital financial literacy curriculum, DFS partners will be engaged to refine the content. All content would be available in relevant local languages.

The suggested delivery of the digital financial literacy curriculum is to follow a similar structure as SIA’s successful delivery of Hey Sister! across numerous countries. This model groups recipients together (ideally based on pre-existing groups such as savings groups) to listen to the audio based skits with a trained facilitator that spurs conversation through question sets. Facilitator guides are already publicly available for the Hey Sister! content. The local DFS agents and/or representatives from cash out locations will also be in attendance to 1) familiarize themselves with the pilot participants and 2) conduct practical examples with participants on how to conduct the cash out process.

The pilot should cover at least 3 transaction periods.

Figure 2: Digital Financial Literacy Curriculum Audio Based Lessons



**Phase 6: Measurement and Evaluation**

Baseline and endline data should be collected throughout the pilot in the form of focus group discussions or surveys. Questionnaires should focus on determining the successes and challenges of the implementation as well as tracking changes in knowledge, attitude and behavior among recipients. Feedback will also be collected regarding recipients’ experience with the digital financial literacy campaign, assessing its usefulness, clarity and impact, in order to refine the content for future training. Recipient feedback, as well as high level PSP transaction data, will be scored against key performance indicators (suggestions listed below in Section V). Based on this measurement analysis, there may be a need to adjust the minimum viable segmentation model to adapt any existing or new data. Should new data be required to better inform the model, the pilot can suggest modifications to the G2P recipient questionnaires used for targeting and registry updates.

**Phase 7: Develop a plan for rolling out the segmentation strategy**

Using the updated segmentation model, a roll out plan will be developed based on the area where the model indicates the largest segment of recipients who are ready to begin using an open loop DFS account. This will involve conducting registration and educational events in those areas preceding the first transfer.

1. **Project Budget**

**Key budget considerations**

1. Staff time
2. Field travel
3. Refreshments for digital financial literacy training
4. Monitoring / Measurement data collection
5. **Project Impact**

KPI indicators:

* # of recipients receiving digital cash transfers into open loop accounts
* # of recipients that registered for DFS accounts
* # of recipients that received digital financial literacy training
* # of recipients aware that they can leave balance in account/wallet
* # of recipients that cashed out 100% of funds in a single transaction
* # of recipients that maintained funds in their wallet
* # of recipients that successfully received their digital cash transfers credited to their wallet by the PSP
* # of recipients that feel safe receiving their digital cash transfers
* # of recipients able to carry out a cash out transaction unaided
* # of recipients that used their DFS accounts for other purposes
* # of recipients that feel more confident using DFS
* # of recipients that can demonstrate how to access various DFS services
* # of recipients that find DFS valuable and useful
* # of recipients that would recommend DFS to a friend / family member