Digital Credit for Smallholder Farmers: a pilot in Myanmar

Early findings from the filed

February 19, 2020

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We would like to express our sincere thanks to
the Government of Korea to make this pilot happen.

Background

Problem

- Delivering financial services to smallholder farmers tends to be costly and difficult

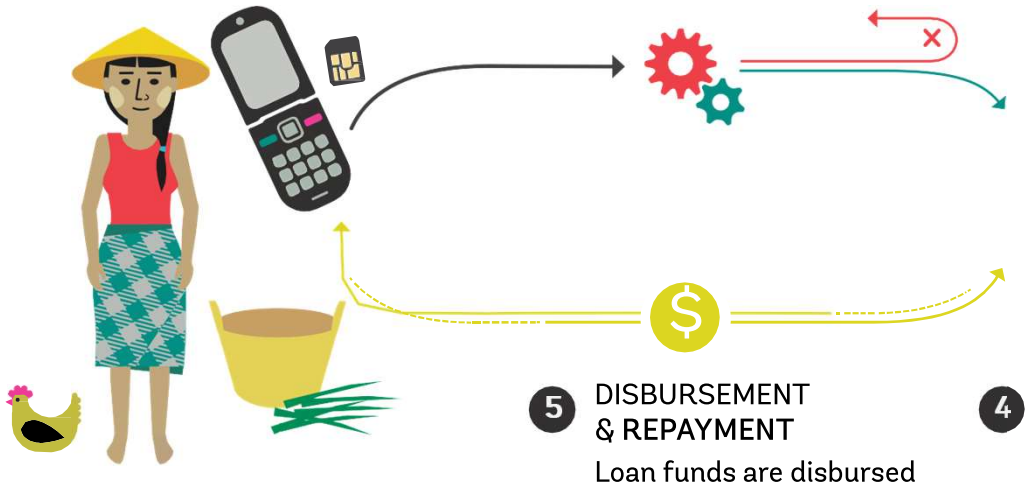
- Lack of access to such services reduces investment in agricultural inputs and lowers farmers' productivity.

- Constraints preventing financial institutions to provide finance to smallholder farmers include:
  - cost of reaching farmers
  - high transaction costs for short-term small loans
  - difficulties in cash management in rural areas
  - limited financial track record of farmers
  - difficulties to assess agricultural production risk

Objectives

This project aims to **test the use of big data and mobile platform as a way to reduce the cost of lending to smallholders**

- Test the ability of advanced ICT to deliver lending to small holder farmers
- Prove it could reduce costs, risks to make it commercially sustainable for financial institutions
- Generate knowledge and learning to share



1 FARMER DATA

Farmer's identity, call/SMS behavior, airtime balance, GPS, and household data is collected.

2 SCORING ALGORITHM

Farmer data is analyzed to generate a composite credit score.

3 LOAN ASSESSMENT

Based on collected information, the loan application is either approved, denied, or referred.

4 LOAN PROCESSING

Loan is entered into the banking system and processed for disbursement.

5 DISBURSEMENT & REPAYMENT

Loan funds are disbursed and farmer makes repayments. Initially, this will be done at the branch. Mobile money integration will be introduced in the third lending cycle.

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Project description

Location

2 townships in eastern Bago region

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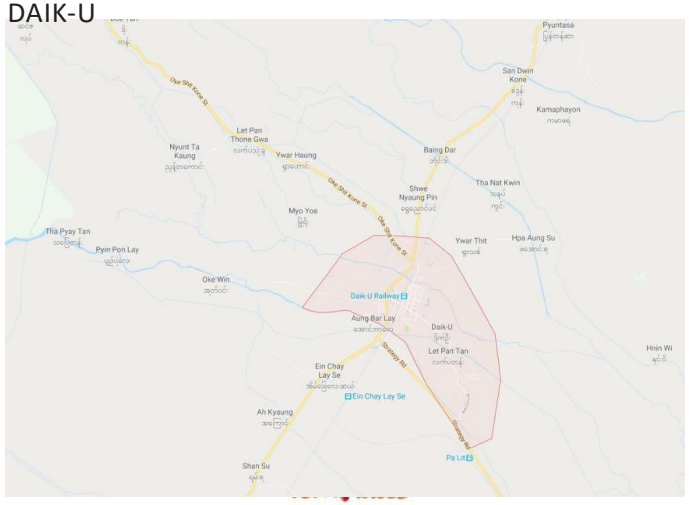
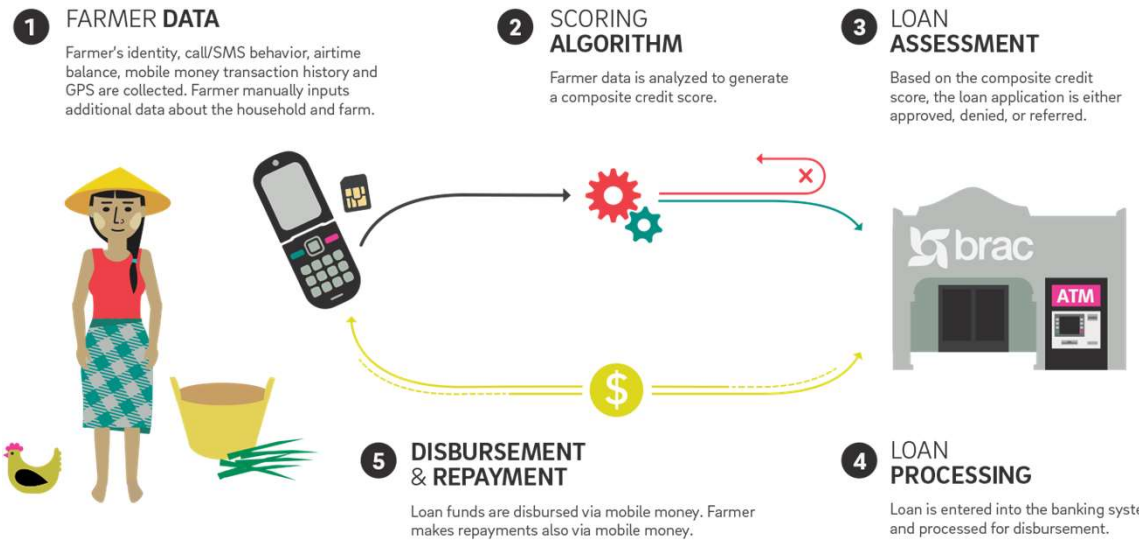
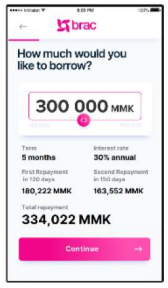


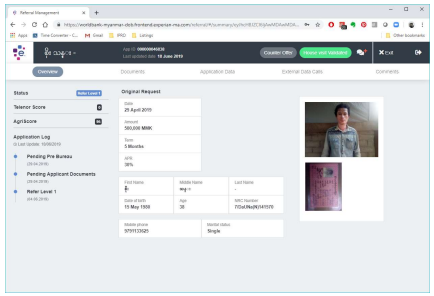
http://yourfreetemplates.com

Key features of the digital lending platform

- Mobile based application interface for borrowers
- Digital data/process management
- Credit analysis
  - Traditional human based analysis
  - Telco Score
  - Agri Score
- Mobile money







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Key stakeholders

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The Facilitator

- Project support function
- Vendor Procurement
- Support with research & design to help inform new product and processes
- Develop learnings and knowledge to share globally

Brac MFI
The Lender

- Ensure a robust lending process
- Maintain regulatory compliance
- Provide loans to smallholders
- Report on pilot progress (smallholder lending)

L-IFT
The Promoter

- Support of go to market activities
- Provide hands-on client support during the application process

Telenor
The Phone Data

- Provision of data for scoring
- Ensure compliance with regulatory issues relating to data sharing

aWhare
The Ag Data

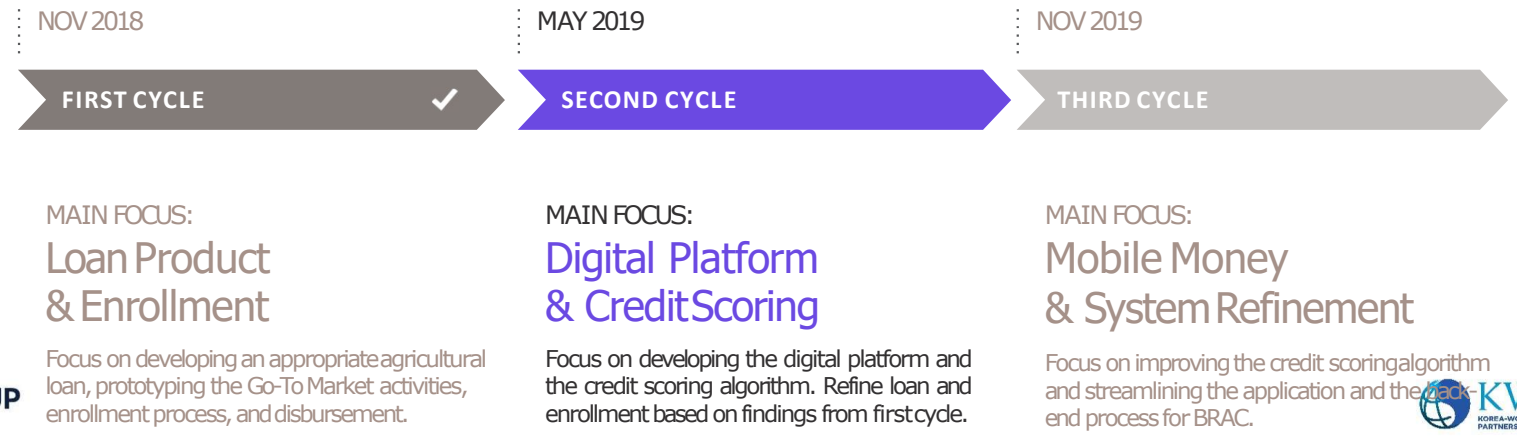
- Provision of data for scoring

Ongo
Mobile Money

- Ensure direct channel access to smallholder farmers
- Provide agent support in pilot area

Activities

- Field research to inform project design
- Development of strategy
- Building a digital platform
- Training
- Outreach
- 3 lending cycles – the iterative approach to develop and refine with every cycle



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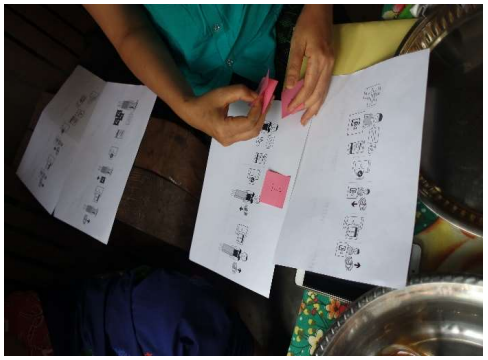
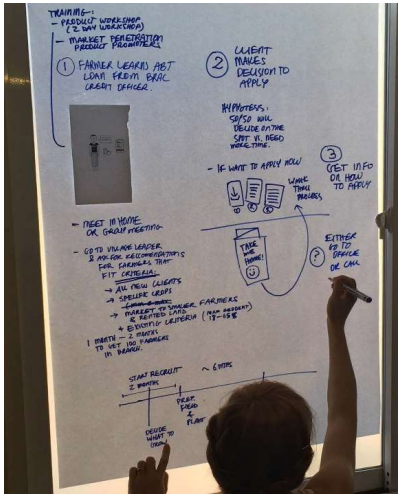
Approach

Human center design approach to design a product

- Understand
  - field research
- Define
  - design a proto type
  - field test
- Develop
  - strategy/products
- Deliver





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Approach

High “touch” approach

Specially trained individuals to conduct hand-holding activities

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Loan product overview

- Available for any crop
- No land title is necessary
- Loan amount: 150-500K kyat (approximately USD100-300)
- Loan duration: 5 month
- Repayment schedule: no payment for 3 month, 50% repayments on each end of 4th and 5th month
- Borrower must used a Telenor SIM card at least 6 month

Outcomes

	Farmers reached	Completed applications	Approved loans	Disbursed loans	Repaid loans	Repayment rate
1st cycle	785	458	227 (141)	227 (141)	227 (141)	100%
2nd	957	709	453 (278)	453 (278)	453 (278)	100%
3rd	884	884	811	761 (573)	-	-

Total number (number for women)

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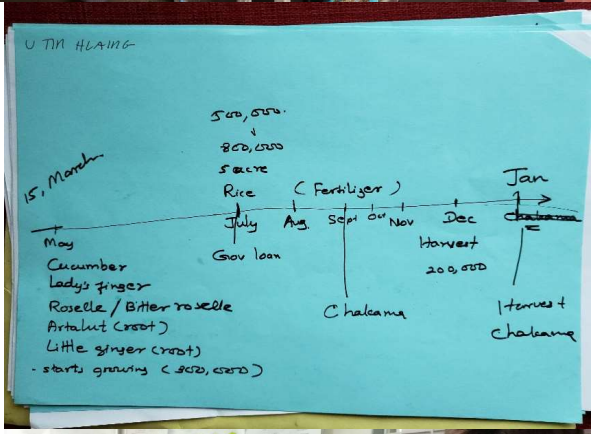
Key findings

A loan product for smallholder farmers

- Demand for loan products among smallholder farmers is high – especially farmers who don't have land title
- Repayment structure to accommodate farmers' cash flow is vital
- The idea of interest rate (instead of actual interest amount) confused many farmers
- VERY high repayment rate (no default) – potential for **business opportunities for commercial lenders**
  - Balance between farmers' needs and financial institutions' operational/risk criteria to be commercially viable



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Digitization – borrowers' end

"I don't know how to use the Internet… I never make calls, just answer."

- Gap between mobile phone "ownership" and "usage"
  - Passive/limited use of their phones
  - Challenges around SMS, web browser, downloading apps
  - Fake smartphones are common
  - Phones bought abroad - difficult to change any settings without expert help
- Phones are frequently shared, lost, or broken; SIM card are often swapped
- Internet access in the rural area is still relatively poor
  - An offline solution is vital
  - Uploading large files (e.g. photo) is challenging
- Local reality vs international standard
  - Font/text: team experienced numerous issues with Myanmar text
  - KYC (Know Your Customer) process: e.g. birthday, address
- Privacy
  - Data privacy
  - A potential advantage in a long run

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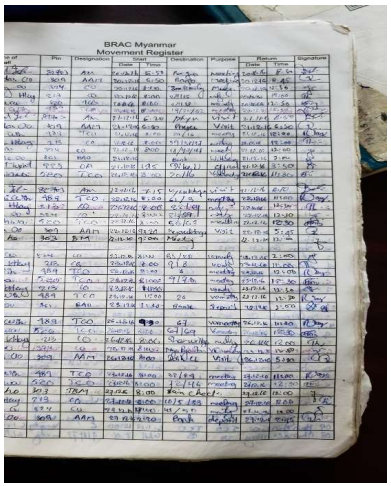
Digitization - lender' end

- Digitizing loan ≠ complete automation
  - Balance between flexibility and efficiency
  - Time to build trust in technology
  - Frequent power outage

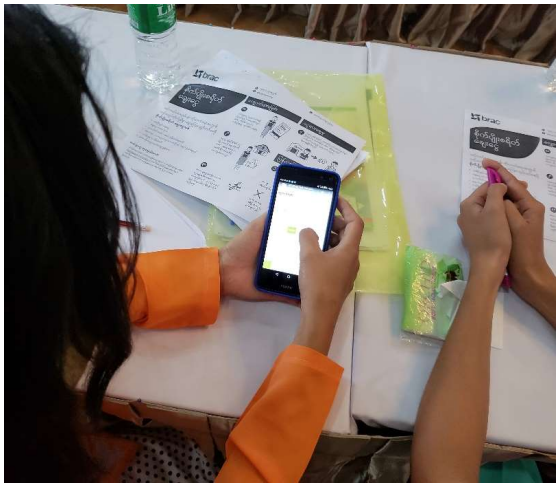
- Increased efficiency is a long-term goal

- Last one mile to deliver the digital service



Training of staff

- Role-play training worked well
- Sufficient training program for each function:
  - Credit officers (BRAC)
  - Field agents (L-IFT)
- Develop rapport among teams



Outreach

- Sufficient number of local agents
  - Local knowledge especially on farmers life
  - Familiarity with mobile tools
  - Hand-holding activities for each borrower
- Finding the right community leaders
- Group meetings - well attended with some challenges with bringing right people with proper documents
- Brochure to let potential borrowers bring homes

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Next steps

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- Lessons learned to be applied on projects focusing on smallholder farmers in selected value chains (e.g. Pipeline project in Myanmar, Cocoa value chain in Ghana, Cote d'Ivoire)

- Tailored digital literacy training for smallholder farmers

<Across WBG>

- A lending platform has been built and under continuous improvement so that bigger number of borrowers can be reached in the future; potential for IFC's investment in selected micro finance institutions to expand or replicate the system.
- Farmers' appetite and preference on financial products have been collected through interviews with selected farmers; potential to inform FCI's advisory service on Myanmar Agriculture Development Bank.
- Issues around ICT infrastructure in the rural area and the level of digital literacy of farmers have been collected through interviews with selected farmers; potential to inform Digital Development GP's Digital Myanmar project.
- Data protection / data management discussion

Thank You!

brac

Appendix

Field research findings which informed the product design

- Even though majority of participants had smart phones, few knew how to use them for more than just making phone calls.
- Awareness of Mobile Money is high in the area, but not many people actually use it.
- Agricultural Practices

<NLP>

  - Dryer soil, most crops require irrigation.
  - Primary crops in the region are:
    - Rainy season: rice
    - Dry season: beans (mung beans, black turtle beans), Some seasonal vegetables (irrigation required), flowers
      Dry season rice (irrigation required)

<Daik-U>

  - Near a river system
  - Primary crops in the region are:
    - Rainy Season: rice
    - Dry season: beans (mung beans, black turtle beans), Corn (human consumption and animal feed), Peanuts
      Roots: Turmeric, little ginger, Artalut root, Seasonal vegetables: cucumber, lady's finger, Roselle, watermelon, chill etc.

- Engagement Models: Completely digital model, mobile money agent model, BRAC agent model, input supplier model
  - Most popular model was the BRAC agent model to include BRAC officer only
    - comfort from in-person interactions
    - no other parties in between
    - more private than agent or supplier