Empowering Indonesia’s “Change Agents” for Financial Inclusion

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Agenda

01 Problem Definition

02 HCD Insights and Financial Diaries

03 Product Design Concepts for Financial Inclusion

Mobile Financial Services (MFS) entered the market in 2007,
yet **only 0.1% of Indonesian adults** have ever used mobile money,
leaving the financial landscape driven by banks and nonbank financial institutions.

Why has it failed to scale?

Intermedia 2014

Poor Design Limits Scalability and Interoperability

Arising from non-intuitive UX, fragmented technology interfaces & technology design lead by disjoint and closed loop legacy systems

"Everything I know about using my cellphone comes from my children"
-IGN Sentana Suastika

NEEDS

- Technology should be the enabler, NOT the disabler - needs to be **affordable, secure and simple**
- The branchless banking pilot was largely aimed at the unbanked customers, who tend to be **less technologically savvy**
- Agents need to be empowered with **low investment, intuitive tools** for education and to efficiently perform **assisted transactions for low sophisticated users**

WHAT THEY GET

"We tried purchasing a 6k Rp soft drink at modern mart POS using mobile money, ended up spending **25 minutes** to transact!"
-Amdocs research team

- Non-intuitive merchant checkout with disjoint interfaces results in high transaction processing times and long ordering queues
- Non-standardized Legacy merchant systems increases onboarding complexity, integration costs and limits interoperability
- Technology-driven design – 26 digits USSD string!

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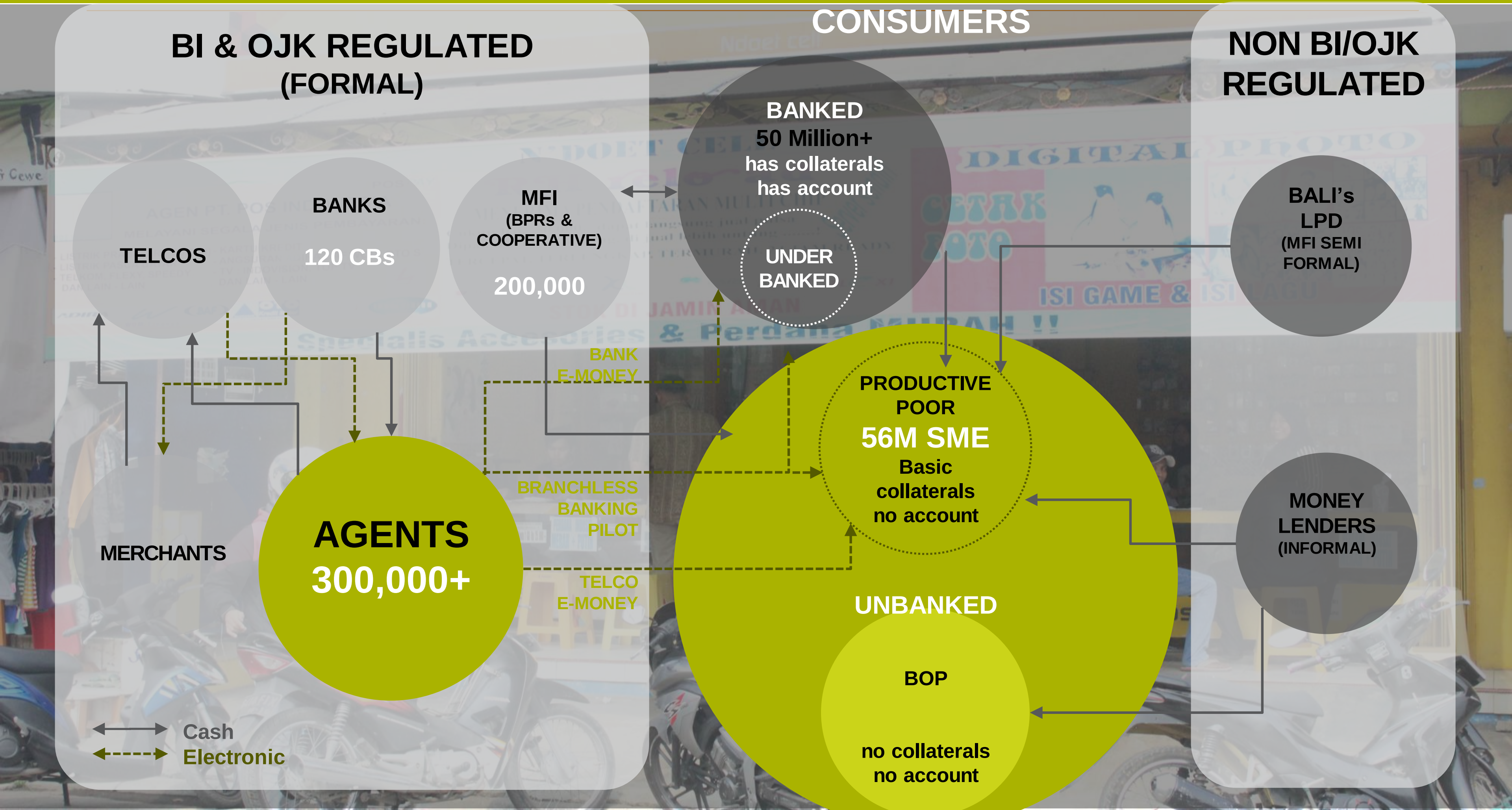
Ordering code that doesn't directly relate to the product's value, forcing users to make extra association

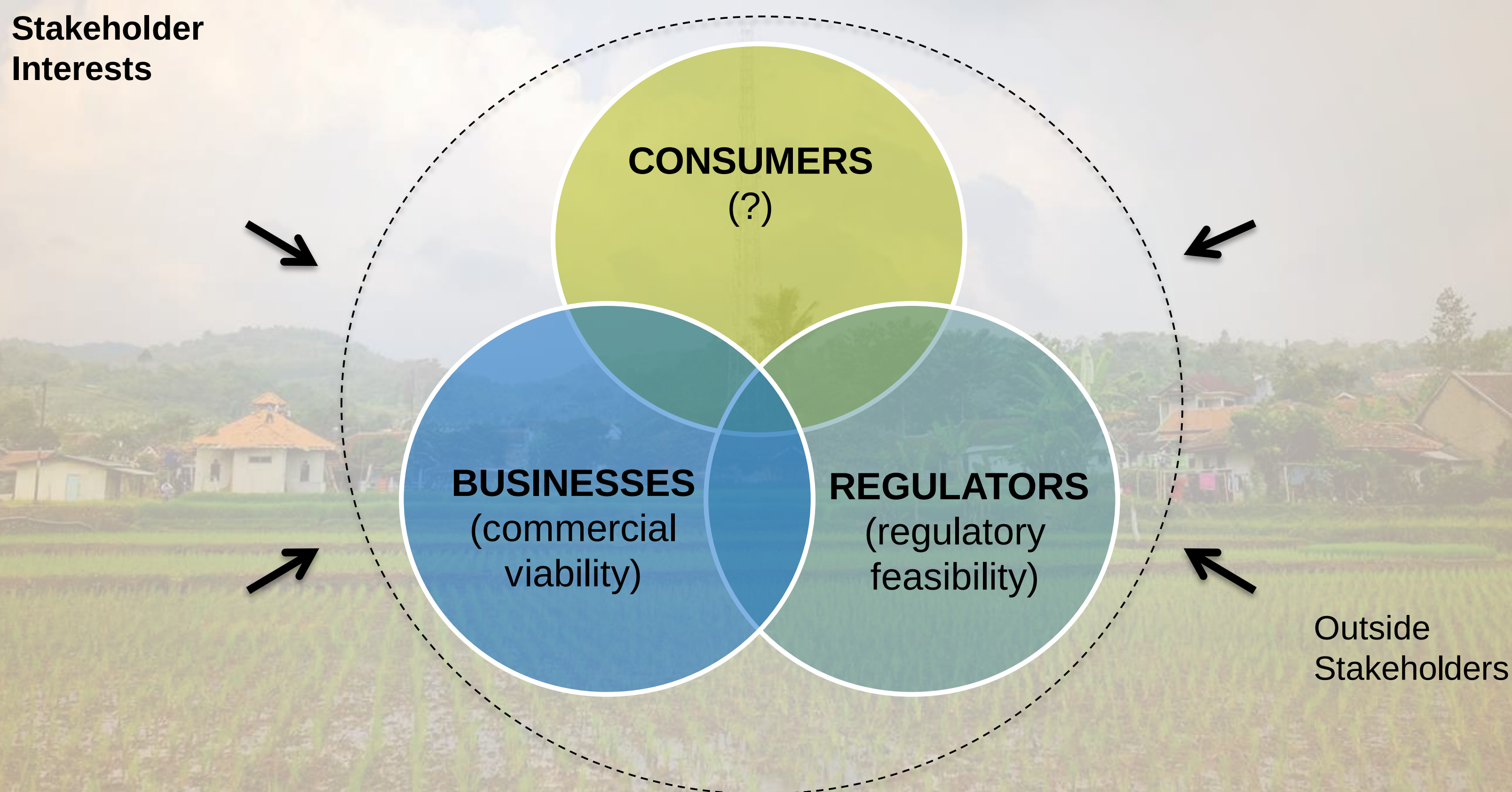
Resulting in products that fail to meet consumer needs

And outperform incumbents like cash and informal financial services



No one has yet figured out what consumers want

Although business interests and regulatory objectives are clearer, all stakeholder interests must align for MFS to reach scale

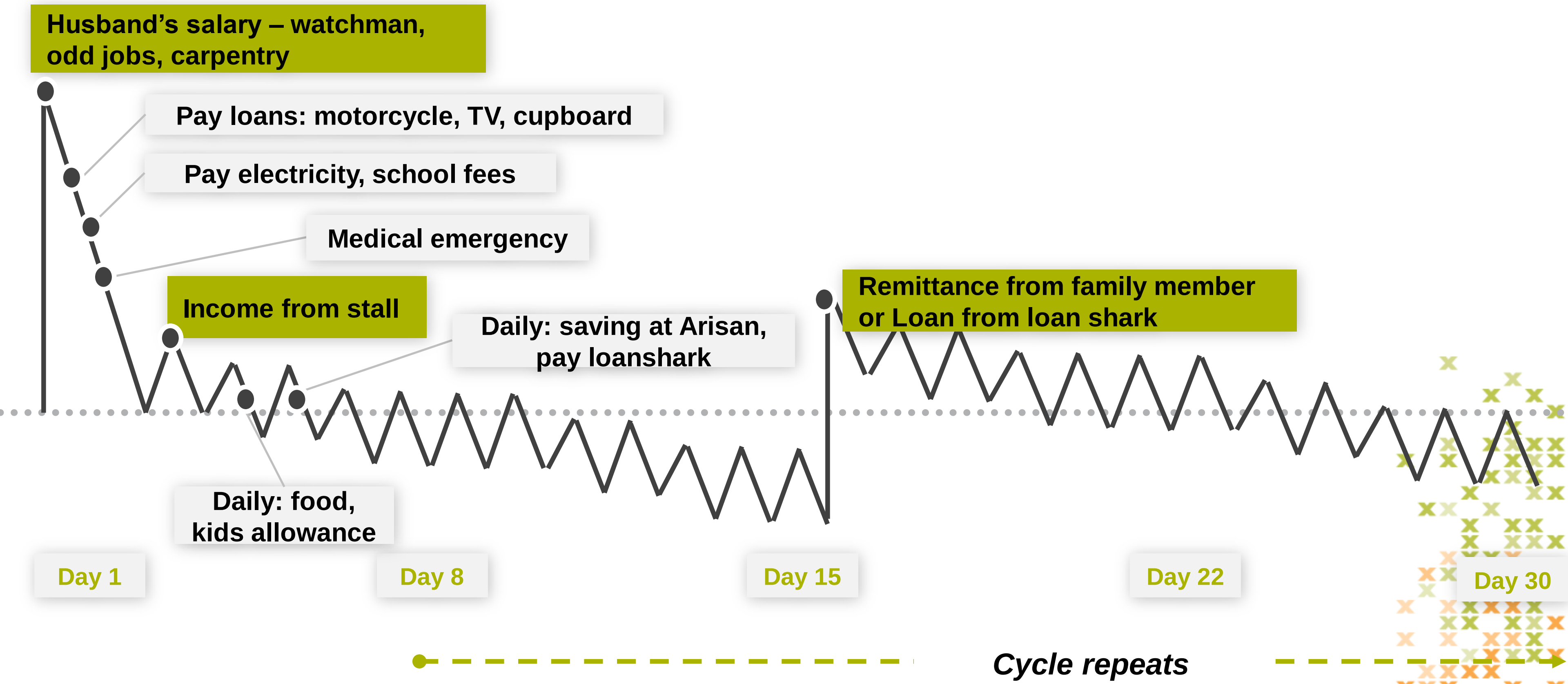



How can HCD help?
Which insights from the field can we leverage to deliver value?

https://www.youtube.com/watch?list=PLnIezJPLlxqvcNS2LXNyZofjzdLDhyejm&v=XaP00Xynfjk

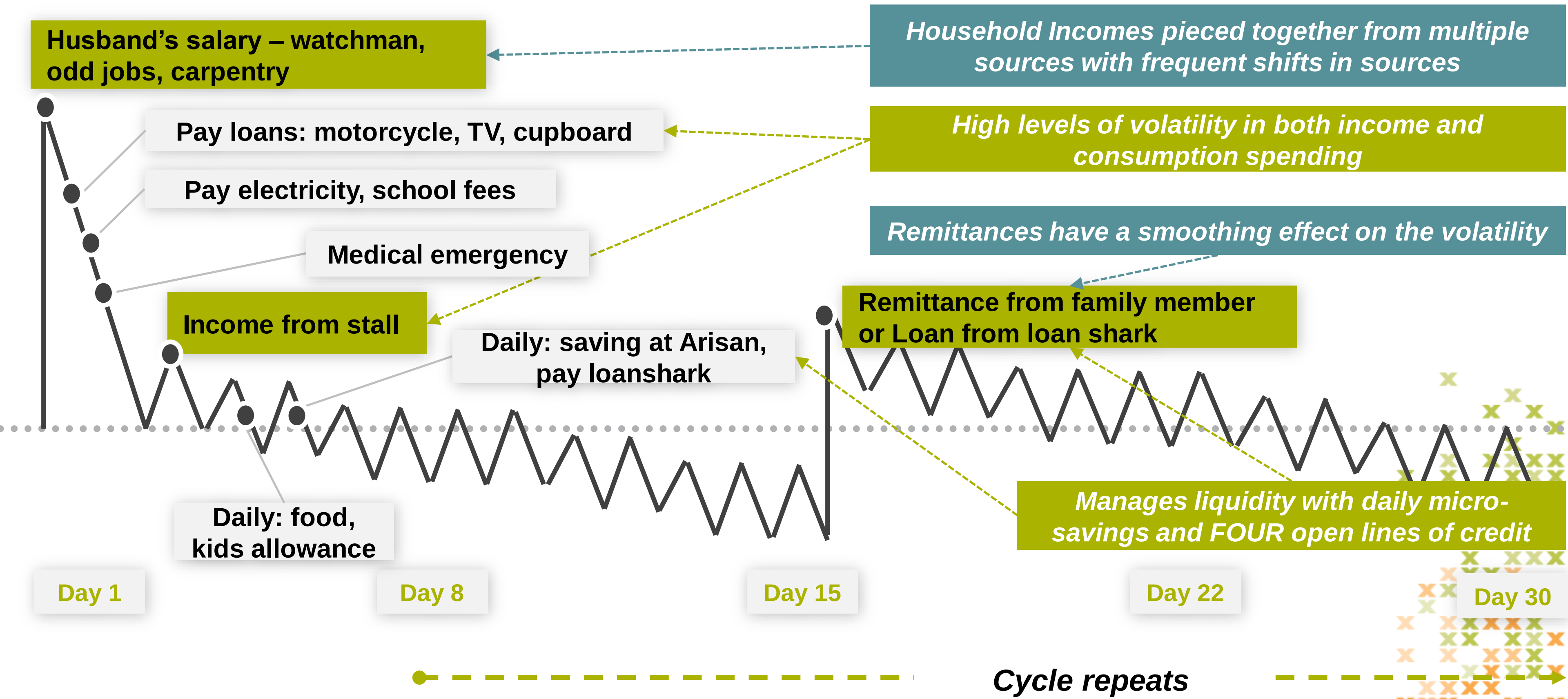
Financial Diary for the Daily Saver

High volatility in income flow, daily active-savings discipline, poor financial literacy and multiple open lines of credit



Financial Diary for the Daily Saver

Majority household income is locked in liabilities and multiples open lines of credits for managing daily liquidity



Majority income is perpetually locked in liabilities versus assets , thus the daily saver is trapped in a cycle of credit

Implications for Product Design

Daily Savings and short-term financing devices help smooth volatility but unable to lift her from the cycle of credit and provide long-term financing to create a lasting impact

- *Higher concentration of income in **liabilities** versus savings with **multiple open lines of credit and poor awareness of interest rates***

1 **Financial Literacy Tools** to **build financial capability,** manage repayment schedules and achieve savings goals

- *Savings are put to work in **'Active' Savings** in ROSCA (Arisan) with tangible benefits of interest payout - either for self or for community*
- *Patience to wait out for longer period yields **higher interest payout***
- ***Low propensity** to store savings in **'liquid' or 'idle' form***

2 The poor need **active savings products** that **yield interests** or **auxiliary benefits** like helping achieve savings goals for **self and community**

- *Match income to **immediate spending in assets** even with unexpected incomes*
- ***Financing options for longer-term investments** are limited to make a lasting impact to livelihood enhancement*

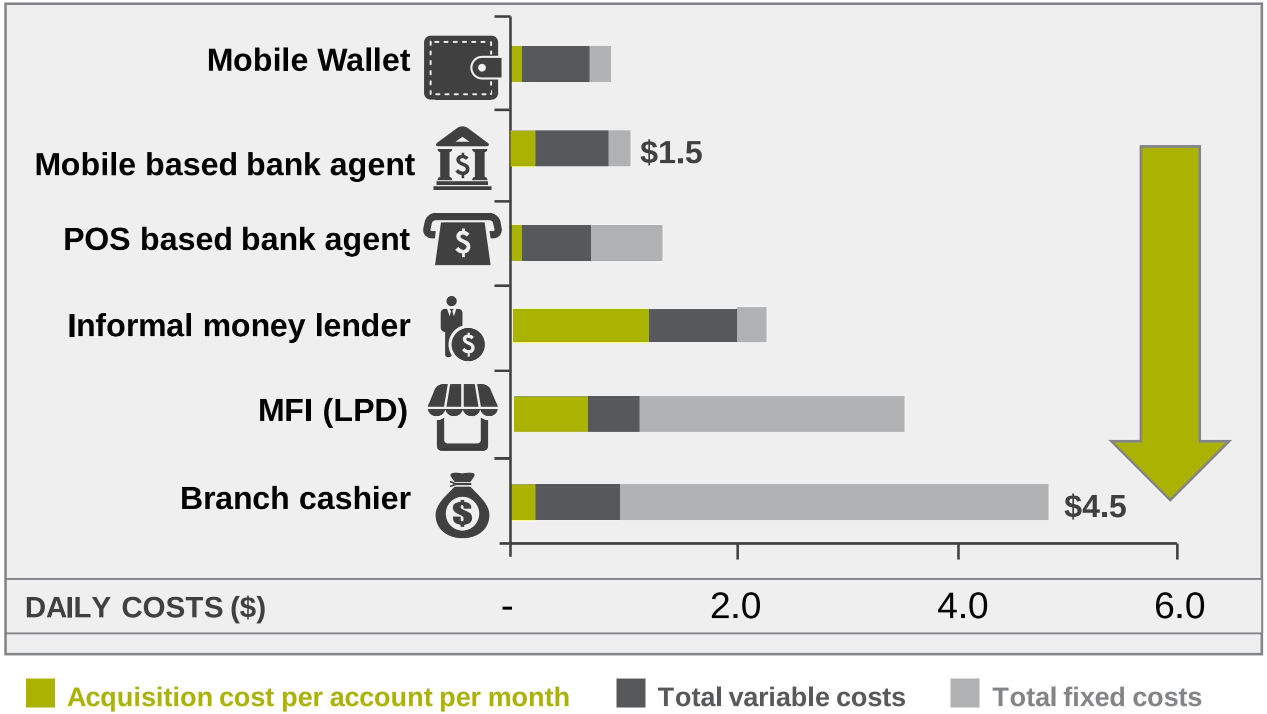
3 Access to **Longer Term Financing Options** with **affordable cost of credit** to realize lasting impact on livelihoods

ACTIVATING ‘CHANGE’ AGENTS

Transform existing retail infrastructure into low-cost community banking outlets

Mobile + Agent Banking lowers costs for financial inclusion

For sustainable financial inclusion products for micro-entrepreneurs like Ibu Gusti



Costs lowered by

3X

** Operating at 100% capacity utilization*

** Illustrative transactional savings account costs $ (2 deposits, 2 withdrawals, 1 transfer in agent channels)*

1. Micro-loans: Short term liquidity shots

Emergency loans products help smooth income volatility and manage short-term liquidity needs

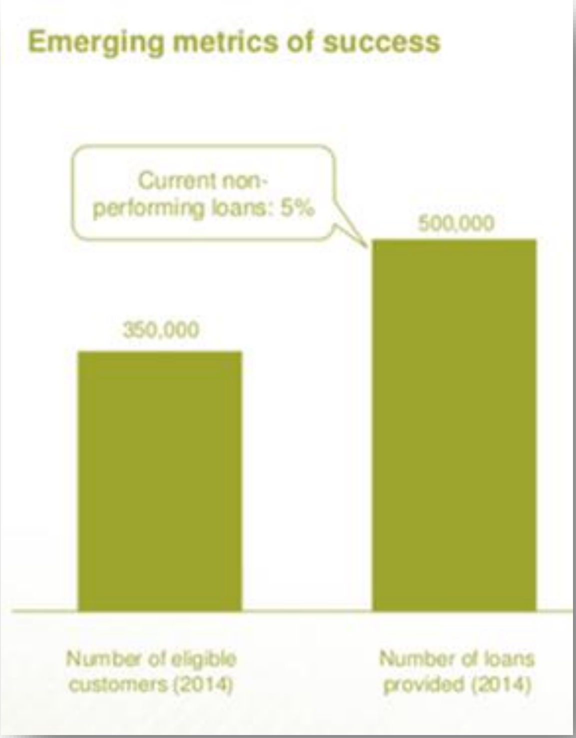
FI – Telco partnership model

- ***Data analytics for risk assessment***
- ***Underwrites credit from their balance sheet and bears risk for defaults***

- ***Serves as initial source for data***
- ***Provides distribution channel for credit provision***

Decision Logic

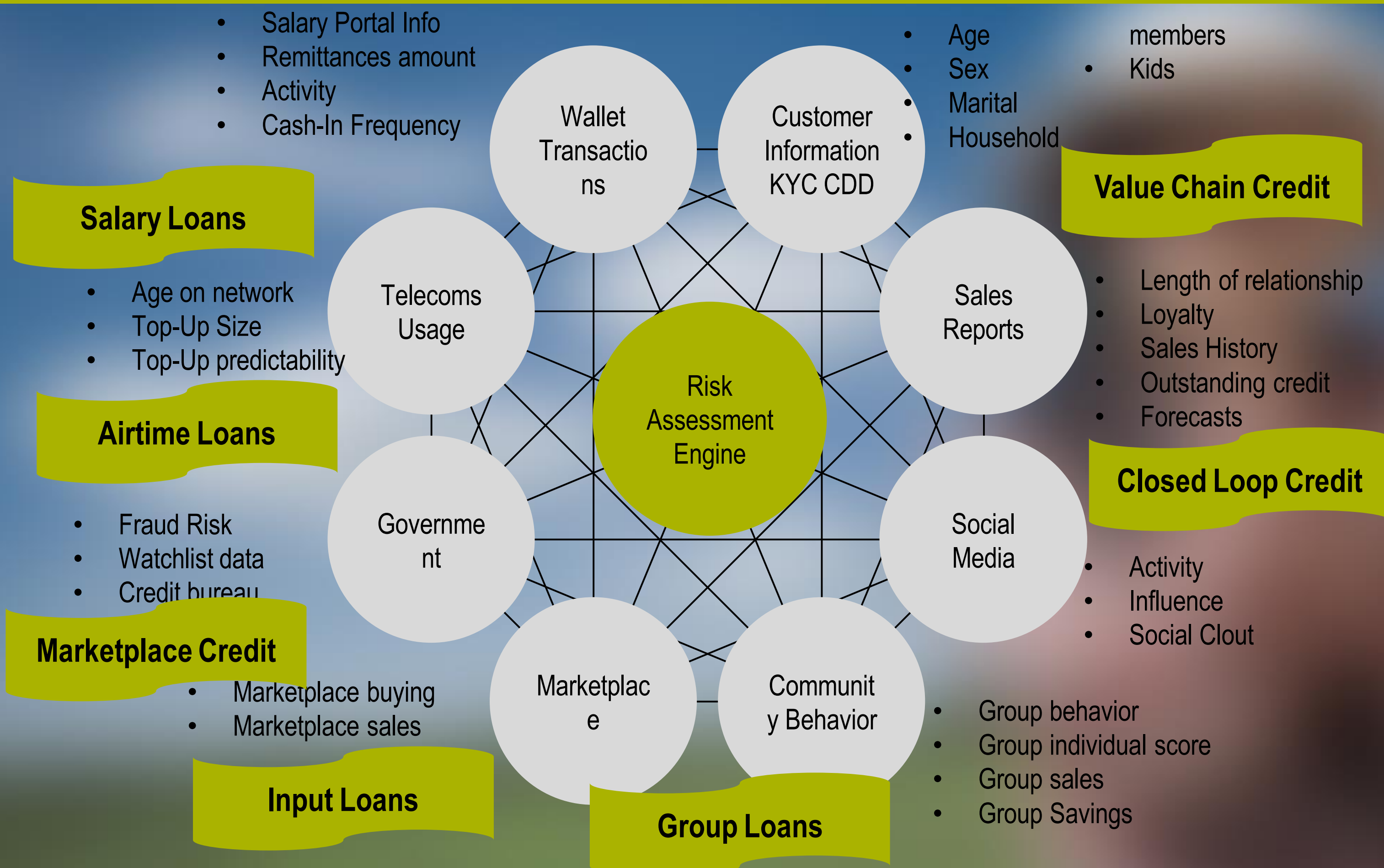
- ***Key data points are level and frequency of mobile money transactions and loan repayments for repeat users***
- ***Call data and demographics do not play as important a role***



Source(s): Industry figures , company reports

2. Build comprehensive credit history via digital footprint

A self-learning 'big data scoring' algorithm that perfects over time and minimizes risk



Integrated decision engine gathers inputs from multiple digital touch-points

3. Extending long-term financing options

Leveraging new age risk assessment models for non-collateralized lending that can make significant impact to the lives of productive poor

Short-term Finance

Goal — **Filling gap between short-term liquidity shots and Current commercial loans**

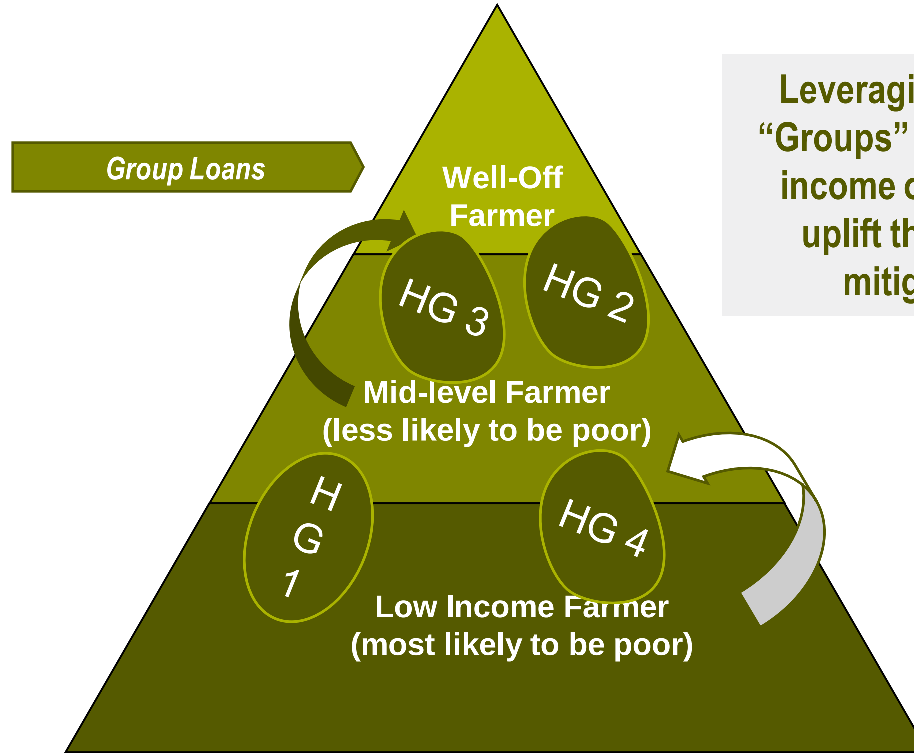
Challenge — **Reducing NPAs and managing delinquency for non-collateralized loans**

Solution — **Leverage self help groups, big data scoring and low cost of tech-driven automated decision engines**

Long-Term Finance

4. Digitizing Informal Micro-finance & ROSCA models

Leveraging group wallets, group savings and group lending for increased credit worthiness



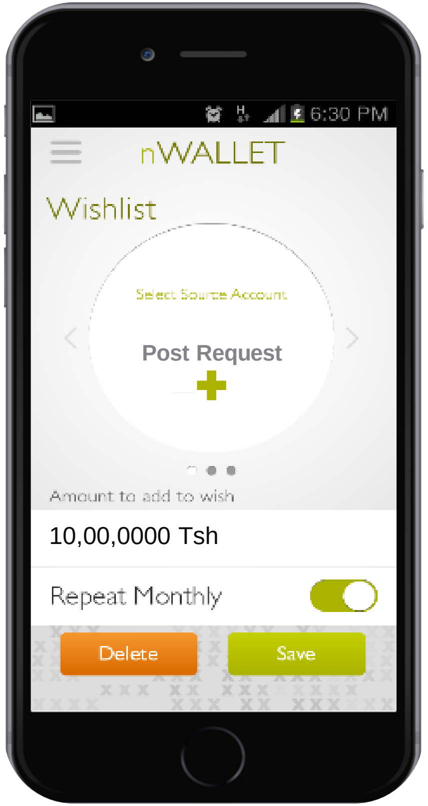
Leveraging power of "Groups" where higher income of leaders to uplift the rest and mitigate risk

Creating homogeneous groups and risk profiles for credit assessment

5. Community based P2P Lending

Crowdsourcing Funds from friends , family and marketplace lenders

Create wish list



Invite friends and family to contribute to wish list and set recurring payments

Track and Redeem Wish (Instant Buy from retailer website)

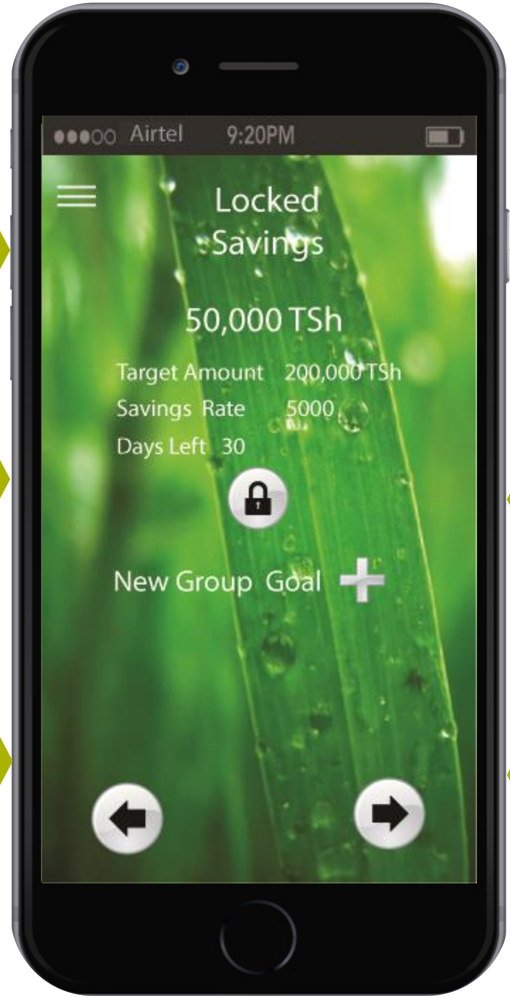
6. Pooled Savings as Pre-Cursor for Financial Capability

Increase Deposit Base for FI to further increase priority lending , increase interest payouts and build financial literacy

1. Create group wallet with term period and savings target defined by group admin

2. Savings rate is automatically calculated based on group wallet definitions

3. Admin invites members to join the group account by linking to existing customer reference number (mobile, email, etc.) . Members accept invite to join



5. Group members automatically transfer recurring amount from principal savings account into group wallet based on rule definitions at product creation

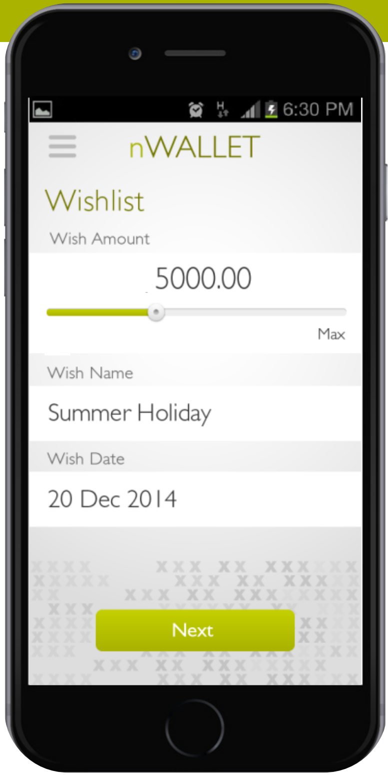
4. UNLOCK: In case of emergency cash-out by a member, group rules define approval terms by all members. Individual contributions will then be transferred to individual wallets

6. Members earn interest on daily/monthly basis against the total wallet balance as per savings terms

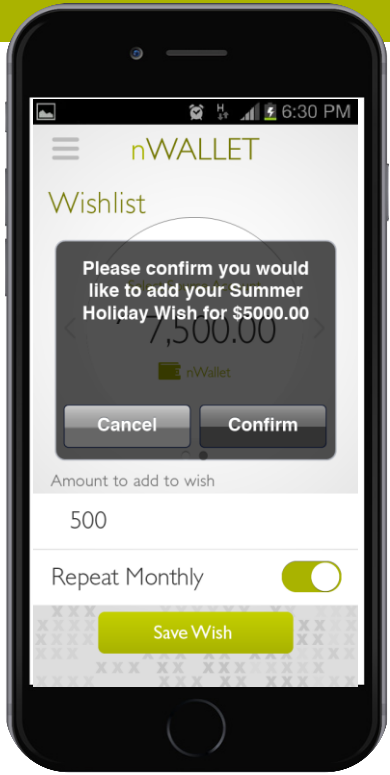
7. Financial Literacy and finance management solutions

Intuitive UX, alerts and gamification to seamlessly build financial capability

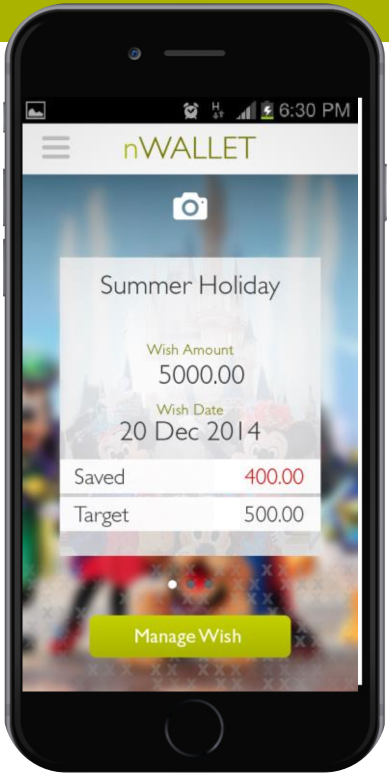
Create New Savings Goal



Define rules for goal and term for savings



Define source funds for drawing savings, and recurrence schedule

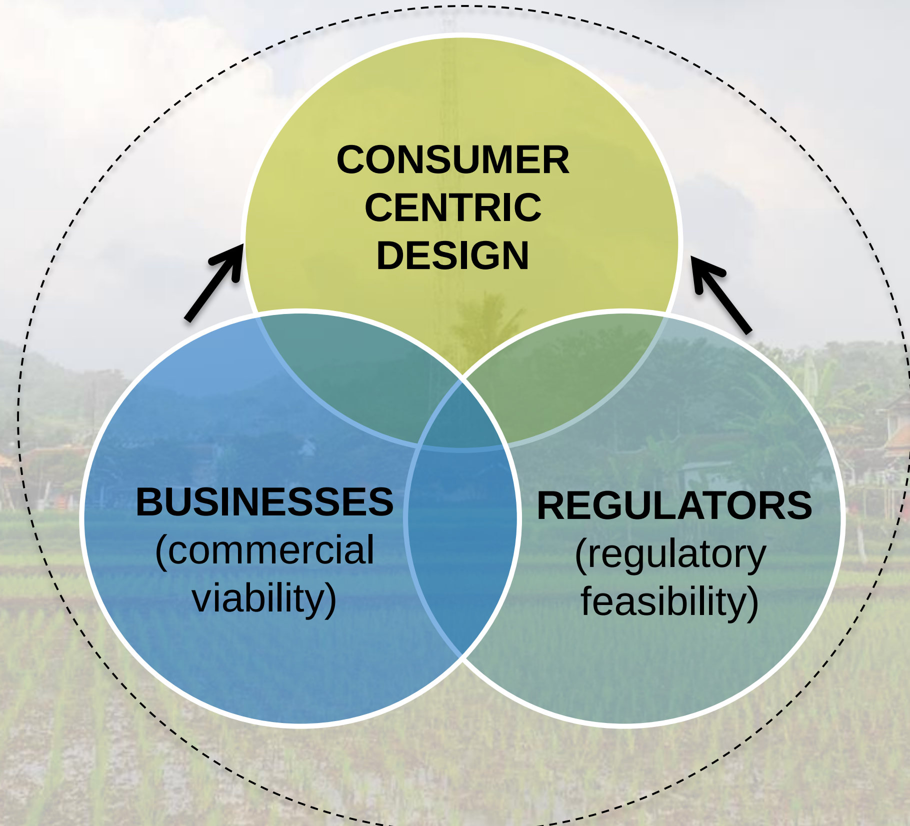


Monitor and manage progress

To summarise…

All stakeholders must align for MFS to reach scale while keeping the customer in the forefront

Design for user engagement versus commercial profitability and lowering costs



- ***Proportional risk assessment and tiered KYC***
- ***Open standard API formats***
- ***Interoperability and shared infrastructure***
- ***Augmenting public-private partnerships***
- ***Pave way for scalability and future-looking technology design***

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1 Baseline delivery costs for lending product

One year loan of $180

	Annual cost per loan, $US	Key activities	Comments
Distribution & customer acquisition[2]	1.0 – 3.5	• Credit officer conducts customer education with potential applicants (e.g., financial literacy training) • Marketing and advertising	• Very little marketing and advertising cost as most new customers come through referrals
Loan application	3 – 5.5	• Credit officer meets with applicant to take in application documents and meet guarantors • Credit officer and branch manager review applications	• Applicants typically must come for multiple visits because they do not have all documents and guarantors on first visit
Loan processing	5.5 – 6.5	• Admin officer enters applicant info into database • Head office or branch manager reviews application • Loan is entered into lending platform • Credit officer gets final customer signature and disburses funds	• Steps can vary according to bank model (e.g., level of centralization, use of technology)
Origination and underwriting	10 – 20	• Credit officer conducts home visit to assess riskiness and collateral • Transport costs for home visit • Credit committee (3+ people) meets to review loan	• Home visit the primary cost driver • Separate in-branch credit committee only exists for some banks
Loan servicing	5 - 9	• Cashier collects loan payments once / month • Credit officer checks in on borrowers over the phone or in-person	• Some banks use mobile payments, lowering cashier costs • Some banks check-in regularly to monitor business performance
Loan maintenance	~0.5	• Accountant manages portfolio, prepares books, and files internal and external reports (e.g., audit)	• ...
IT	2 – 2.5	• Labor and infrastructure costs on maintaining core loan management system	• ...
Collection	1.5 - 7	• Credit officer calls and text borrower • Credit officer visits home of borrower to collect collateral and track down guarantors	• Cost varies significantly with share of loans in default at a given time and intensity of collections operation
Risk cost	9 – 11	• Losses from write offs	• Loss rate of 5-6%, typical across business offering microloans
Total	**40 - 65**		