



AGRI-FIN MOBILE CASE STUDY

THE PRODUCTS

Lessons learned and experiences from
early stages of product development

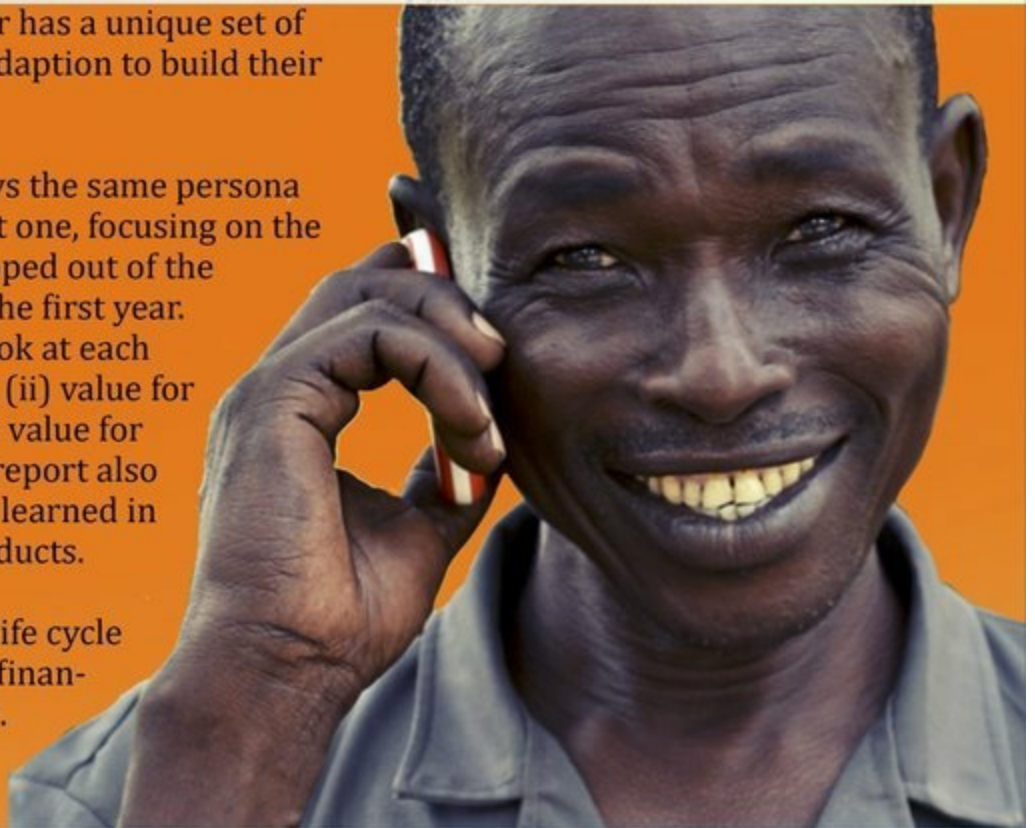
Indonesia, Uganda, and Zimbabwe each present a new country context where, based on market assessments, findings from the research on farmers' demands, Mercy Corps' relationships, the needs of farmers, regulatory environments, and existing players in the market all suggest they require a different approach to who delivers what components of the model, and who plays a larger or smaller role in doing so.

Lessons that have been learned from this partnership selection and developments have been highlighted in the Year 1 eBook. In addition to country context, each partner has a unique set of circumstances that require adaption to build their value proposition.

This second eBook employs the same persona methodology used in the first one, focusing on the products and services developed out of the partnerships established in the first year. E-Book Two takes a closer look at each product's: (i) characteristics, (ii) value for the service provider, and (iii) value for the smallholder farmer. The report also features the lessons we have learned in the development of such products.

At each stage of a farmers life cycle there are different needs for financial and information services. During Planting, the farmer requires access to information on input recommenda-

tions, as well as loans and insurance to purchase new inputs and protect his or her investment. At this time, the farmer is also purchasing inputs and requires a payment mechanism to send payment to the input supplier. During the Growing season, the farmer continues to purchase inputs and requires information and recommendations, as well as payment mechanism. In addition, the farmer also needs weather data. Upon Harvest, the farmer will be looking for an off-taker and needs market-pricing information to negotiate their harvests, as well as a payment mechanism to receive payment from the buyer. After Harvest, the farmer will need a safe place to hold their income, as well as look for new information for the next Planning season, that will require information on the costs and availability of inputs, as well as predicted market prices for the new season.



Mobile based information and financial services are valuable tools that can address the farmer's needs at each stage of their cycle. Below, you will find explanation and case studies on each type of service and how it can be used to address farmer needs.

INTRODUCTION

Technology-based applications aimed at enhancing rural markets have rapidly proliferated over the last decade, with the heaviest concentration of deployments found in Africa and South Asia. These deployments primarily offer information services to a range of individual and institutional end users, including: farmers, NGO staff, field academics and researchers, government workers, small and medium-sized agricultural enterprises, and major agri-businesses. The dramatic increase in the availability and affordability of mobile communications services and the capabilities of mobile networks has greatly expanded the reach and utility of these technology-based applications. Additionally, with the advent and expansion of mobile money and branchless banking services, applications designed to exclusively provide information services can now be coupled with a new method for conducting electronic transactions (such as making or receiving payments and transfers) and accessing basic financial services (storing value).

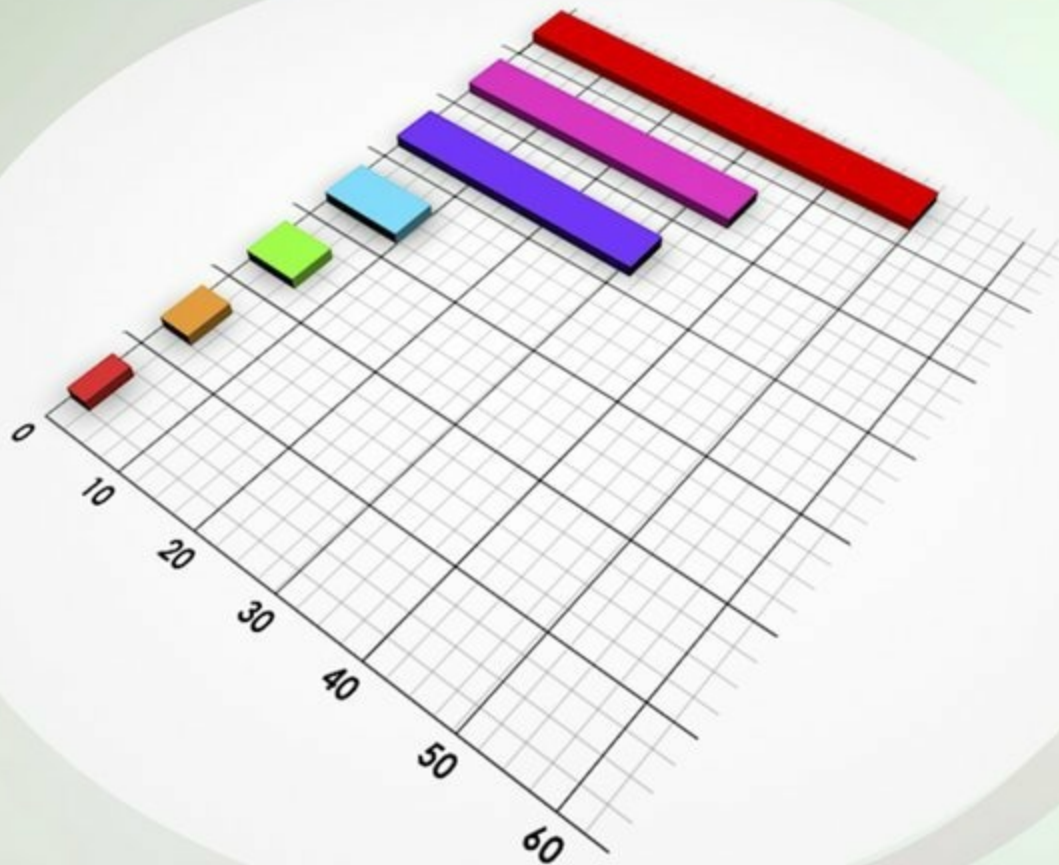
These factors enable mobile money providers to assume a leading role in the development and provision of agricultural applications as they recognize that population demographics and labor force distribution in most developing markets require a robust agricultural market entry strategy. Third party providers (e.g., applications developers) are also responding to market needs and developing new and targeted products. The final piece is the growth in Smartphone penetration, which enhances the user experience and expands the available application functionality.



Exhibit 1

Categorizes selected application into various application types. As shown, agricultural extension services and market pricing dominate the technology based application landscape. It should be noted that several providers and programs offered multiple application types

Exhibit 1: Application Breakdown by Category



● Ag Extension Services

● Market Pricing

● Market Linkages

● Value Chain Payments

● Loan Disbursement & Collection

● Insurance

● Voucher Distribution

INFORMATION SERVICES

The most widely used technology-based applications to date aimed at supporting rural market systems and actors are those that provide users with access to relevant information. These information flows serve a variety of functions and vary in its degree of targeting and interaction. In most cases, dissemination of information relies on the availability of mobile networks.



Product A: Market Pricing and Linkages

Market Pricing refers to information flows that provide users with prices for select agricultural commodities and other inputs (e.g. fertilizer). Depending on the level of sophistication of the application, pricing information moves in one direction, from the application provider to user, and is generally disseminated at set intervals (e.g. once a week). In more sophisticated applications, users are able to select which commodities and input prices they receive information on and submit those requests according to when they need access to that information. Market pricing information is sourced either from available data—provided in most cases by government institutions—or directly collected from specific markets. Users can access this information via mobile device in voice (pre-recorded messages) or text format (either SMS or USSD) or via internet on a desktop, laptop, or touch screen device.

Exhibit 1: Application Operational Complexity

Key Attributes

Operational Complexity

Low

- Systems pushing one - way information
- Information push is automatic and not targeted
- Information is stored in a common database prior to dissemination

Medium

- Systems pushing one - way information, but includes location information to target content (e.g., GPS coordinates)
- Includes multiple data feeds generated from multiple sources
- Relies on multiple information data bases

High

- Two - way systems that provide individual feedback and advice
- Use technology to collect user generated content
- Often require more sophisticated devices (e.g., Smart phones and higher Band width)
- Relies on multiple information data bases

Lessons Learned From Early Stage Product Development

- Content development for market pricing can be costly and difficult to manage. It makes most sense for organizations to outsource these inputs if it is not part of their existing operations.
- Use existing traders in the field to collect market prices on a commission basis. It is key to clearly define products and value proposition and engage as a first stage with a Minimum Viable Product (MVP). Trying to implement a full suite of services can back log developers and confuse the customer messaging.
- Create a gateway and revenue model that will open up future value added services. Look for what farmers find valuable and if there is willingness to pay, and then the added free information that they find valuable, but may not be willing to pay for.
- Alternatively, instead of provision of direct market prices, create platforms where farmers can access information through their peers, market actors and local extension workers.
- A well-defined marketing strategy for the product is core to having uptake and reaching farmers.
- Willingness to pay can be tested to see value and feedback from users with a free grace period for the product.
- Profiling of farmers on-site to the system with limited network connectivity was a challenge and requires an alternative offline registration process.



SPOTLIGHT

Profile: Fit Uganda Limited

- Uganda's leading agriculture business development consulting company and rural advisory service provider;
- Provides capacity building and facilitation support to agriculture oriented small and medium enterprises (SMEs) across Uganda;
- Develop content for use by agriculture sector for delivery through SMS, radio and text based channels;
- Track market trends, pricing and availability of inputs and market demand and prepares for market dissemination;
- Develops customized mobile applications for public and private sector partners wishing to communicate to farmer beneficiaries and clients;
- Works through both public and private sectors to support service companies, NGOs, governments, and donor programs working with the SME and smallholder agriculture sector.



Product:

FARMIS (Farmer record Management information system) and **AgMIS** (Agriculture market information system)

- The platform allows farmers, cooperatives and farmer associations to profile its members and monitor production performance;
- Farmers are profiled and receive timely, relevant and context specific information on market prices, growing tips and cropping calendars;
- Farmers receive market, weather and advisory information services;
- Content is delivered through both SMS and radio channels.

Farmis Platform Video



Cost:

Associations can subscribe for UGX 360,000 (USD 139) on an annual basis and is valid for all the farmers in the association. Farmers are also able to subscribe individually and pay UGX 20,000 (USD 8) for two crop seasons and can register up to three different crops to receive content. Trained agents from within the associations are used in the registration process of farmers through the mobile platform and earn UGX 1,000 (USD 0.38) for every registration. In addition, there is a revenue sharing model with the mobile network operators (MNOs) to share revenue from SMS fees generated through pull message requests.

5 Keys to Successful Products: 8Villages

Accessible	● ● ●	System allows for self- registration using USSD short code
Relevant	● ● ●	Information is tailored to relevant crops and crop cycle
Understandable	● ●	Information is not available in local dialects
Reliable	● ●	Information is sent through push service and is not available on demand
Affordable	●	Cost can be prohibitive for many subsistence farmers

Product B: Agricultural Extension Services

Agriculture Extension Services refers to information specifically designed to support production capacity and livelihoods among farmers and other rural residents. The information available can consist of farming techniques and trends, weather, pest or crop disease advice, and seed or other input management techniques. In the most basic offering, communication between application provider and end user is one-way with prepared tips or alerts transmitted via mobile channel in the form of voice, SMS, or video clips depending on the sophistication of the mobile device available to the end user. If the end user has access to a desktop, laptop, or touch screen with internet, they can receive this information via email and video clips. In some instances, these basic offerings will also allow users to query static information from a dedicated database. More sophisticated applications are able to deliver spatial or location-specific information to users but require integration with remote sensing instruments and geographic information systems (GIS).

Lessons learned from early stage product development

- Developing systems to automatically pull context specific content will reduce costs and provide the most relevant information to the user.
- Marketing and incentives to onboard new users is key and can be done through corporate relationships as well as individual registration.
- Partnerships with Ministries of Agriculture and Agriculture Extension Offices will allow providers to access new content as well as new distribution channels.
- Collaterals should be designed for the user and incorporate images and text related to both genders.
- Quality services will incorporate both push and pull information for farmers. Important to have feedback loops with the application users that not only capture their responses but provide agility in adaptation of the services.
- Content development is an ongoing dynamic process that requires the presence of content managers imbedded within the organizations managing the service.
- Optimize content management through utilization of automatic query aggregation and macros to discover frequently asked question.

SPOTLIGHT

Profile: 8Villages

A Singapore based social enterprise linking smallholder farmers to their local communities of peers, their harvest buyers and their local agri-experts through mobile phones.

Product:

- LISA, a mobile phone based subscription service
- Allows farmers to interact with other corresponding community groups based on their crops and location.
- Inside that group, users get daily SMS tips from 8villages and other local user-generated content.
- Users are also able to ask their own questions and get them answered either by other farmers or by agricultural experts from 8villages' partners. This all works without the need for an internet connection.
- The system creates up-to-date "Frequently Asked Questions" that informs future push messages
- Sends messages in SMS format, which farmers can save for later use.
- LISA is also available on corporate subscriptions for input supplies, buyers, banks and NGOs to communicate information within their networks.



Cost:

- LISA is available on an individual registration basis for IDR 2,200/month (USD 0.20) for Telkomsel's user, while free of charge for Indosat's users. Upon registration, farmers will receive an SMS each week asking them if they would like to continue their subscription. Fees are deducted from their airtime and sent to 8Villages.
- LISA is also available to corporate partners to bulk register customers or members. Discounts are given for larger bulk subscriptions and fees vary depending on the number of messages the partner would like to subscribe to.

5 Keys to Successful Products: 8Villages

Accessible	● ●	System allows for self- registration using USSD short code, however is only available from two of the major MNOs
Relevant	● ● ●	Information is tailored to relevant crops and crop cycle and is generated by a logarithm of FAQs through the system.
Understandable	● ●	Information is not available in local dialects
Reliable	● ● ●	Users have the ability to ask specific questions, as well receive push.
Affordable	● ●	Cost is minimal for Telkomsel users and free for Indosat

FINANCIAL SERVICES

With the emergence of applications that permit the issuance, storage, and transfer of electronic value, farmers and other rural market actors now have access to an alternative transaction method for making and receiving payments as well as a new delivery channel for receiving and using a range of financial services products. They also have a secure savings mechanism. These financial services applications provide multiple functions that are relevant to rural market actors, including: voucher distribution, value chain payments, loan distribution and collection, and insurance. It is believed that providing financial resources to farmers improves their ability to treat farming as a business and enables them to increase revenues by facilitating interactions with previously unreachable elements of the value chain.

Product C: Warehouse Receipt

Warehouse receipts provide a record of ownership of commodities that have been deposited at a specific location for storage and safekeeping. For smallholder farmers, these receipts can be used to access loans or lines of credit because they are viewed by many banks, MFIs, and other financial institutions as an eligible form of collateral. They also offer smallholder farmers greater flexibility vis-à-vis the timing of when they sell, allowing them to delay sales when prices are low immediately post-harvest. For other buyers and sellers further up the value chain, warehouse receipts can be used in commodity exchanges to conduct transactions without requiring the movement of physical goods until the transaction has been completed. As financing becomes more available with a reliable method of documenting Ag production (volumes, quality, and location), traders and other buyers have access to more money to buy more commodities. This has the potential to benefit smallholder farmers as well through increased competition in the market, which can serve to mitigate severe drops in prices.

Warehouse receipts can be issued in paper or electronically. Electronic receipts can be stored on a plastic card issued to individual farmers or on a SIM or mobile handset via SMS text message. Applications that support either card-based or mobile-based electronic receipting services are connected to a back-end system database (either basic excel or a more sophisticated MIS system) that maintains information specific to the farmers who deposit commodities for both internal record-keeping and external compliance purposes.

Receipting, however, is only one of several core components that make up a well-functioning, sustainable warehouse receipt system (WRS). Other components include: standardized grading and weights, standardized storage facilities, professional storage management, market-appropriate insurance products, enforceable contracts, and market intelligence (i.e. knowledge of available outputs and buyer/seller locations as well as the ability of financial institutions to evaluate warehouse receipts as viable collateral). While technology-based applications and other ICTs can be applied to a variety of warehousing activities, their incorporation may not be required or warranted in markets lacking the

components identified above nor are they likely to facilitate their emergence. That said, in markets where core WRS components exist, there is a trusted regulator and sufficient commodity volumes moving through warehouses, technology-based applications can offer time and cost savings by reducing transaction and processing times, automating data management, and accelerating information flows.



One such customer is Bapak Ramdhani who is very excited about the Local expert on LISA program



Profile



PROFILE:

- Married.
- Have 1 children.
- University of Pajajaran Bandung to get Bachelor.
- Senior high school at Krida Nusantara.
- University of Winaya Mukti Bandung to get Magister.
- Extension workers (THL-TBPP) Village of Puspasari, Subdistrict of Pedes, Karawang.

Local Expert of Agriculture:

- Be local expert on LISA application (2013- now).
- Have more 200 farmers.

Performance:

- Can answer ± 10 question from farmers on LISA.
- Can get new user LISA from LISA Ajak Ajak program ± 20 per month.
- The best local expert on LISA

Impact of LISA on him

Why he likes the program:

- Can share his knowledge to some farmers.
- Get access LISA free.
- Get Tips and trick every day
- Easy to get more information about agriculture.

How he feels based on the program:

- The information can spread largely.
- Can repeat our knowledge that has been gotten before.
- The communication be more easily by feature group.
- Get more knowledge that he didn't know before.
- His job to present information of agriculture more easily.



One such customer is Bapak Asep who is very excited about the LISA program



Profile:

- Married
- Don't have children
- Maritim Academy Cirebon to get Diploma
- Ever be private extension workers

USER LISA:

- Active in feature group LISA
- Can grow his productivity up to 30% by recommendation Tips and trick.
- Active to send question to LISA.

Performance:

- Get increase productivity of rice field from 5 ton - 9 ton per Hectare.
- Can apply some tips and tricks from LISA to his field.
- Can combine between organic and chemical system to his field.
- Can share his experience to LISA.

Impact of LISA on him

Why he likes the program:

- There are more good recommendation when he start to planting.
- Get update information about agriculture.
- Interested to daily tips LISA.
- Free access to get information about agriculture everyday.
- Can send question and communication with expert directly.

How he feels based on the program:

- He gains knowledge that he didn't know before.
- Get more knowledge agriculture.
- Can apply organic technical to his rice field correctly.
- Can get more knowledge information in another area about agriculture.



One such customer and as extension workers Ibu Kurniatin Nia who is very excited about LISA program



Profile



PROFILE:

- Married.
- Don't have children
- University of Bale Bandung to get Bachelor (2008).
- University of IMNI Jakarta to get Magister (2010).
- Senior High School in SMK N 2 Subang.
- Extension workers (THL-TBPP) in Cigadog and Darmaga Village, Subdistrict of Cicalak, Subang from 2011 until now.
- Headmaster of Miftahul Baryah Vocational Senior High School, from 2011 until now.

Business history

- Crispy chips since 3 year ago (2011) until now.
- Turnover 500 thousands until 1 million IDR.

Performance:

- Income her loan amount from 2 until 2.5 Million IDR per month.
- Can get new user LISA from LISA Ajak Ajak program ± 20 per month.
- Best five of LISA Ajak-Ajak 1st period.

Impact of LISA on Her

Why she likes the program:

- Can get more information about agriculture.
- Easy to share her knowledge to some farmers.
- Easy to share all of agriculture information with used group feature.
- Get insight from daily tips and trick.
- Easy and free to access.

How she feels based on the program:

- The information easy to share to farmers.
- Can repeat the knowledge that has been gotten before.
- The communication be more easily by feature group.
- Get more knowledge that she didn't know before.
- Easy to ask and comment about agriculture problem.

One such customer as farmer is Ibu Tjutju who is very excited about the LISA program



Profile:

- Married
- 4 children (2 children married, work as nurse, and University 3rd years).
- Graduated of Senior High School in Subang.
- She is a head of Pitaloka female farmers group.

USER LISA:

- Active in feature group LISA.
- Active to use LISA Ajak-ajak feature.

Business Story:

- Have animal husbandry (Chicken).
- Work as farmer as 1994.

Performance:

- Get income productivity of Horticulture (peanut and cucumber) 2 until 3 million IDR per harvest period.
- Turnover of Chicken is 2 until 3 million IDR per 40 day.
- Can apply some tips and tricks from LISA to her field.
- Best of the best LISA Ajak-Ajak 1st period.

Impact of LISA on her

Why she likes the program:

- Get update information about agriculture.
- Can asked directly to expert.
- Interested to daily tips LISA.
- Interested about LISA Ajak-Ajak and LISA group feature.
- Free access to get information about agriculture everyday.

How she feels based on the program:

- She get information of agriculture that she didn't know before.
- Get more knowledge agriculture.
- Easy to share about LISA to another female farmers especially to her member.
- Easy to ask and comment about agriculture problem.
- Can get more knowledge information in another area about agriculture.

8 villages



Lessons learned from early stage product development

- Reaching scale is key. In markets where supply chains are fractured it may require setting up relationships with many buyers to achieve scale and sustainability.
- Data migration is the biggest challenge encountered by WRS service providers.
- Each user of the system has their own procedures and the system will usually require customization for each user.
- Cloud based systems are preferred to ensure secure off-site record storage, user friendliness and reduced investments in hardware.
- Data collected using WRS is easily transferred to credit scoring systems to allow end-users to access capital required for future inputs.
- Accurate credit scoring will be achieved when multiple data points are encoded and is easier when working in value chains with frequent sales and payments, such as dairy and horticulture.
- Systems are optimal when non-exclusive to a single MNO or financial institution, offering the most flexibility and choice to users and their farmer clientele.
- Mobile wallets integrated to WRS will allow for seamless payments to farmers generated by farmer deposits.
- This service may not have a revenue model, and instead sold to as a service (SAAS) basis.

SPOTLIGHT

Profile: Mobile Pay

A Kenyan technology company, which has developed AgriLife multi-functional platform currently being used by the Agri-Fin Mobile program in Uganda; Considered a third party service provider because it's not exclusive to any one mobile network operator or financial institution; Allows for optimal interoperability—important in Ugandan market given that there is no dominant MNO or financial institution capable of scaling.



Product: Agri-Life

A cloud-based, platform with many functionalities and interfacing capabilities, which can offer financial and information services through its centralized management information system

Enables collection and tracking of data on small-holder farmers (SHFs), including what they produce, when they produce it, what price they sold it for and where the sales proceeds went.

Production data is used to create a credit score and predict future cash flow for farmers that financial institutions can use to facilitate lending.

Agri-Life has their own mobile wallet that allows for users to pay their farmers electronically and automatically using the production data collected.

In addition, the system is able to text blast users with any information the user wants to communicate to their farmers including prices and crop tips.

Financial institutions are also able to facilitate their loan disbursement and collection through Agri-Life's mobile wallet.

Cost: Farmers and buyers do not pay for access or installation of AgriLife including customization and data migration. Mobile Pay earns revenue once the credit scores are used to facilitate lending, and the financial institution pays a percentage of loan interest to Mobile Pay. In addition, Mobile Pay earns revenue from transaction fees for using the mobile wallet that are paid by the buyer and financial institutions.

5 Keys to Successful Products: Mobile Pay

Accessible	●	System is only accessible for farmers selling to buyers that have on-boarded the system. Payments are not integrated to most mobile wallets.
Relevant	● ● ●	Access to loans is predominantly the largest barrier for SHFs
Understandable	● ● ●	The system is web-based and has an easy to use interface for buyers
Reliable	● ● ●	The web-based system has off-site storage and back up.
Affordable	● ● ●	The cost is free for both buyers and farmers.

Product D: Value-chain Payments

Reducing cash payments along selected agricultural value chains is viewed by farmers, buyers, traders and suppliers as a valuable innovation. This type of service typically involves enrolling previously unbanked farmers into some sort of electronic wallet or low-end bank account. The target value chain is examined and the transition point from electronic payment to cash payment becomes the focal point for the program. Often lead firms play an active role in the program in order to reduce their cash handling responsibilities and as a mechanism for ensuring supply.

Lessons learned from early stage product development

- Agent networks in rural areas are sparse and can require significant investment from the provider to ensure ease of access to the end-users.
- Agents may require additional training to accurately process value chain payments, as they are typically only capacitated to do cash in, cash out and remittances.
- Utilize existing networks in rural areas that already have relationships established with farmers to establish new agent networks.
- Opening agents in rural areas is likely more difficult due to lack of legal registration of small shops.
- Communication between buyers and the mobile money provider is key to ensuring sufficient liquidity when needed during buying season.
- Smaller MNOs may not have the largest customer base but are usually more agile and willing to invest in infrastructure required to do payments as they tend to be more aggressive in wanting to capture new markets.

SPOTLIGHT

Profile: Orange Telecom Uganda

- Mobile network operator and subsidiary of France Telecom
- Entered the Ugandan market in 2009 and has built a big niche on data service provision
- Has the smallest market share with less than 15% of total SIMs in the market.
- Launched its orange money platform in January 2013, and as of April 2014, had 360,000 users.
- Targeting Rural markets as an expansion strategy for growth on voice , data and mobile money services

Product: Orange Mobile Money

- A mobile money wallet that provides value storage, cash in, cash out, money transfer, bill payment and balance checks using a USSD platform that can be accessed from any phone.
- Buyers make bulk payments to farmers.
- Farmers can buy inputs at any retailer accepting Orange Money.

- Pilot launched Jan. 2013
- Anticipated to be integrated into AgriLife platform in the long-term, to enable loan disbursement and collection to be facilitated through Orange Money
- Provides agricultural value chain payments to buyers in Uganda
Provides training to buyers' field extension officers and farmers on how to use the product
- Allows for buyers and their agent networks to become mobile money agents

Cost:

Orange Money is charged on a per transaction basis. End-users are not charged to cash in however fees are charged on a tiered basis to cash out, send remittance or do bill pay. Fees range from 6% - 0.1%, depending on the amount. Bulk transfers from buyers to farmers are charged are not charged (which one?) a transaction fee, as costs are recovered through cash-out fees.

5 Keys to Successful Products:

Accessible	●	System is only accessible for farmers with Orange SIMs
Relevant	●	Not all input suppliers and buyers use Orange Money for payments. The mobile 'ecosystem' is still limited.
Understandable	● ● ●	The system has an easy to use SMS and USSD menu.
Reliable	● ● ●	The Orange signal is widespread and reliable.
Affordable	● ●	The cost for buyers is free, and farmers pay a fee for cashing out, which is considered competitive in the market.

Product E: Loan Distribution

Applications support loan initiation, disbursement and collection either through MIS systems that offer MFIs and banks the ability to electronically register, record, authorize, and analyze loan disbursement and collection transactions while using agents or other channels that are closer to the target community. Recent innovations such as AgriLife enable rural farmers to provide key business and financial metrics to financial institutions in order to facilitate the pairing of potential loan recipients and loan providers. In many cases, these channels include the use of mobile phones and GSM enabled POS devices

Lessons learned from early stage product development

- Develop partnerships through corporate buyers and off-takers to reduce risk for financial institutions.
Credit scores can be used based on farmer selling behavior.
- Financial institutions all have different parameters for credit scoring. This should be mapped prior to product development.
- Social networks (virtual networks or physical groups such as VSLAs) can be used to access credit worthiness of groups based on sample data.
- Financial institutions look for scale and require access to large groups of farmers to establish relationships
- Farmers can use warehouse receipts to capture previous sales data to be used as credit scores and as collateral for future loans.
- Financial institutions reduce their risk by developing relationships with off takers for direct payment, rather than loan collection from farmers.
- If working with farmer groups, as opposed to individual farmers, facilitation and socialization may take longer.
- Product requirements vary from user to user, what the other buyer needs would be different from another buyers requirements, this customization process takes a lot of time if not timed well with the season
- Product is not a final end, other factors such as the interaction to the platform through mobile should be considered and work with other partners to build a robust ecosystem.

SPOTLIGHT

Profile: PT. Bank Andara

Bank Andara is a wholesale banking institution with social and financial bottom lines. Bank Andara launched in 2009 and currently serves as a strategic banking partner to the Indonesian microfinance sector in providing wholesale loans and payment services.

Established by a trusted international investment consortium, Bank Andara's shareholders are Mercy Corps, IFC, KfW, Hivos-Triodos Funds, and Developing World Markets Fund S.C.A – SICAV SIF, global investors in microfinance.

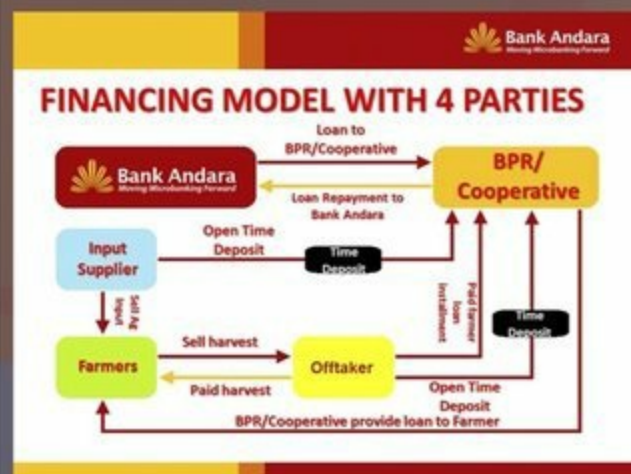
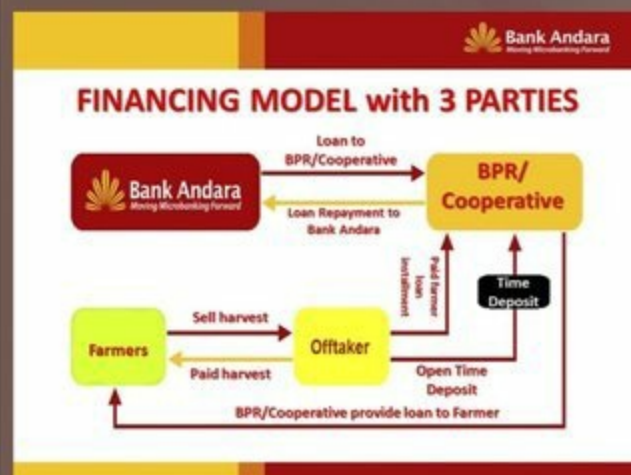
As of March 2014, the Bank currently works with almost 800 MFIs throughout Indonesia, including loans to 563 MFIs and installed Andara Link payment services to 446 MFIs. The bank intends to reach 1,200 MFIs in the next three years.

The Bank has four branches in Jakarta, Semarang, Surabaya and Denpasar and has 179 employees as of March 2014.

Product:

Working Capital Loans (Kredit Modal Kerja, KMK) is a loan product of Bank Andara to Rural Banks (BPR) and Cooperatives to be on lent to the farmers which have partnerships with input suppliers and or off-takers/buyers.

The loan scheme include either three parties (MFI, Off-taker/Buyer, and Farmer) and four parties (MFI, Input Supplier, Off-taker/Buyer, and Farmers).



In these schemes, loan product specification to the MFI, include:
Disbursement pattern is Executing (100% risk is covered by the MFI).

Tenor:

Maximum 3 years (36 months).

Loan period that has ended cannot be extended, but the MFI can submit application for a new facility with terms and conditions to be determined later in line with result of Bank Andara's analysis, unless there is a special policy or provision permitting an extension.

Loan period begins and matures based on date of first disbursement; for further disbursements (disbursement in stages), maturity date is adjusted to period of first disbursement.

Loan guarantee:

Receivable fiduciary of 100% to 120% of credit ceiling

Cash collateral of 10% to 20% of credit ceiling

General requirements for the MFI:

Submitted credit application;

Have minimum assets of IDR 1 billion (approx. USD 86,000);

Have legal entity status and have been in operation for minimum of 2 years;

Have legal documents and permits;

Have financial statements;

CAR 10% or higher;

NPL < 8%.

Cost: Interest is charged to the MFI is 13% effective per annum and Commission and Administration fees are set at 0.5% of the loan ceiling (paid in advance during the period of the loan) and Commitment fees (such as notary fee, revenue stamp, etc. in amounts in line with prevailing rates).

5 Keys to Successful Products: Bank Andara

Accessible	● ●	Is only available for those farmers who client/member of MFI and has relationship with off-taker and or input supplier in the partnership scheme.
Relevant	● ● ●	There is a large demand for loans
Understandable	● ●	The loan scheme may be less understood by poorly literate farmers.
Reliable	● ● ●	If requirements are met, the service is always available, and can be accessed through the MFI office.
Affordable	●	The cost for the loans is considered competitive, although still high.

Product F: Insurance

A key factor limiting the spread of agriculturally based insurance products is the difficulty and expense in collecting low value premiums. New insurance applications allow insurers to provide electronic policy application, approval, and registration to rural residents. In markets where insurers already work through authorized intermediaries to provide an alternative service delivery channel, these applications reduce transaction costs by streamlining and automating existing insurance pay-outs or policy premium collection schemes. In markets where the use of intermediaries is cost prohibitive, these applications offer insurers an opportunity to explore alternative service delivery channels and extend down market to expand their client base. Where viable mobile money systems exist, the ability to make small electronic payments also extends the viability of the service.

Lessons learned from early stage product development

- Simplicity is key in product design – the process of facilitating application, approval and registration of smallholder farmers through the mobile phone needs to be as simple as possible without confusing the farmers interested in completing the process. Complex applications can impact uptake.
- Insurance must be marketed before the growing season begins. If done during, then good weather conditions will have strong negative impact on the sales of the product.
- Farmers are willing to pay for insurance, and pilot tests show that their price sensitivity peaked at about 25% of the cost of seed inputs.
- First year payouts under the policy will demonstrate to farmers that the product is trustworthy and has worthwhile benefits.
- Marketing can be done through story telling as a simple way to demonstrate the value of the product.
- Farmer education is key to explaining the complexity of the product.
- Use simple, easy to understand triggers for insurance payout.
- Having multiple product options can confuse the farmers, however, the product needs to be comprehensive enough to cover multiple weather and calamity related issues that are faced by farmers.
- Having multiple payment options will allow a broader group of farmers to onboard to the product.
- If product is not index based, claim validation of claims could be a challenge.
- Insurance can be used as collateral substitute for accessing loans.
- Historic and trigger event data must come from the same source. Re-insurers prefer satellite as the most common source of data.
- Weather data must be independent.

SPOTLIGHT

Profile: EcoNet

- Zimbabwe's leading MNO
- Market share: over 80%; mobile penetration: over 90%
- Using its mobile money platform as a conduit for moving funds in and out of accounts for premium collection and pay-out of micro- insurance products
- Building a completely in-house bundled service with coordination from the Ministry of Agriculture, the Zimbabwe Farmers Union, buyers and input suppliers, and Mercy Corps

Product: EcoFarmer

- EcoFarmer, a suite of products designed to serve farmers including a mobile wallet, advisory service information and crop insurance.
- Provides tiered registration that allows farmers to register for crop tips only (free), as well as insurance.
- If farmers go through the full registration process, they will receive crop specific information tailored to their needs.
- Crop insurance is opted in on an annual basis on a fee for service basis.
- Crop insurance uses local weather stations to produce an index based payout policy.

Cost:

- SHF are given the option to pay either a \$10 or \$2.50 premium for insurance cover of a 10kg of maize seed for a payout of \$100 or \$25 respectively per agriculture season. Farmers can cover a maximum of three 10 kg bags of maize seed per season.
- SHF access the information services(farming tips, market prices, weather information) for free

5 Keys to Successful Products: EcoNet

Accessible



The service is only available for EcoNet subscribers.

Relevant



Floods and droughts are very common occurrence and highly affect SHFs

Understandable



The premium and payout may be difficult to understand for poorly literate farmers

Reliable



Instant information about payouts and coverage is provided.

Affordable



The cost for the insurance is considered competitive, although still may be high for subsistence farmers.

Watch the 2 Agri- Fin Mobile program content platforms

FARMIS in Uganda

<https://www.youtube.com/watch?v=BRUCdr-lnhE>

8 Villages In Indonesia

<https://www.dropbox.com/s/2v2xgmw4knp4xca/%E2%96%B6%208villages%20farmer%20profile%dl=0>



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