mAgri Design Toolkit
User-centered design for mobile agriculture
The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and Internet companies, as well as organizations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai, and the Mobile 360 Series conferences.

For more information, please visit the GSMA corporate website at www.gsma.com. Follow the GSMA on Twitter: @GSMA.

GSMA’s mAgri Program catalyzes scalable, commercial mobile services that improve the productivity and incomes of smallholder farmers and benefit the agriculture sector in emerging markets. The mAgri Program is in a unique position to bring together mobile operators, the agricultural organizations and the development community to foster sustainable and scalable mobile services that improve the livelihoods of smallholder farmers. This report is part of the mNutrition initiative, launched by the GSMA in 2014 in partnership with the UK Government’s Department for International Development (DFID).

For more information, please visit the GSMA M4D website at http://www.gsma.com/mobilefordevelopment. Follow us on Twitter: @GSMAm4d

frog is a global design and strategy firm. We transform businesses at scale by creating systems of brand, product and service that deliver a distinctly better experience. We strive to touch hearts and move markets. Our passion is to transform ideas into realities. We partner with clients to anticipate the future, evolve organizations and advance the human experience.


For more information, please visit the frog website at www.frogdesign.com. Follow frog on Twitter: @frogdesign.
The mAgri Design Toolkit is a collection of instructions, tools, and stories to help develop mobile agriculture products by applying a user-centered design approach.

The mAgri Design Toolkit is one of the outcomes of a two-year initiative led by the GSMA mAgri Program. From 2014 GSMA worked closely with six mobile network operators (MNOs) — Airtel Malawi, Dialog Sri Lanka, Grameenphone in Bangladesh, Ooredoo Myanmar, Telenor Pakistan, and Vodafone Ghana — to develop and launch life-changing mobile agriculture services.

The MNO-led services target smallholder farmers with a focus on providing agriculture information and advisory services, as well as nutrition-sensitive agricultural information and tips, and in some cases mobile financial services.

The GSMA mAgri Program partnered with frog to bring the user-centered design approach into the product development process, to better connect the mAgri services with the needs of farmers and other key actors in the ecosystem. frog has been coaching UX experts within each of the MNOs, working closely with them to establish and practice user-centered design methods tailored to the mobile agriculture context and needs. All the tools provided as part of the mAgri Design Toolkit have been tested, proven, and refined multiple times on the ground before being included in this collection.

The design toolkit is intended as an instrument to provide operational guidance to the development and implementation of mAgri services. Designing services around the needs of the rural user is critical to the success of mAgri services. Besides service design, MNOs and value-added-services (VAS) providers must form partnerships with ecosystem players, including agriculture content providers. They must also identify the best-suited technology delivery channels for their target markets, and then implement viable marketing strategies, including both above-the-line (ATL) and below-the-line (BTL) marketing. All of these elements are intertwined with user design and are critical to a viable and sustainable mAgri business model.

Please see the appendix for the suggested GSMA resources that should be used alongside this toolkit.
User-centered design helps MNOs and VAS providers to understand what farmers really need, thereby increasing the chances of launching successful mAgri services.

Many mAgri services that have launched in emerging markets have suffered from low user adoption, despite coming from leading mobile network operators and value-added service (VAS) providers.

The rural segment is highly price sensitive, requiring service providers to consider highly competitive pricing and freemium models. Reaching scale is therefore critical in order to derive commercial benefits.

Tackling these challenges can be daunting for any service provider, but the size of the agricultural sector and the number of people who rely on farming for their livelihood in emerging markets, means that service providers can’t ignore the opportunity to deliver services to this largely under-served segment. GSMA mAgri estimates the labor force in agriculture to be 552 million, and agricultural workers with a mobile phone to be close to 200 million in Sub-Saharan Africa and South Asia in 2015.

I feel adopting a user-centered design process is a must when you develop mobile products for a segment such as farmers. It gave me the confidence that we have got the basic elements of the product right in order for it to be accepted by the users. We are continuously sharing our learning with fellow product teams in Dialog to help them understand the user better.

Inas Jenabdeen, product manager, Dialog
WHY IT IS IMPORTANT

The work that frog Design has been doing to support key actors to design products and services for smallholder farmers is really revolutionary and has certainly changed the way I think about serving the rural poor, even after 20 years of experience. Frog’s meaningful and compelling client-centric insights are helping field staff, management and boards of directors to design for and meet the needs of smallholders, making sense of how technology can have a human face and be impactful, while being sustainable.

Leesa Shrader, AgriFin Accelerate program director, Mercy Corps

The user-centered design approach helps mAgri service providers get a much better understanding of this customer segment and their ecosystem, and then design appropriate products and services that meet the real needs and challenges of the customer. This approach is not typically followed by many MNOs or VAS providers, which has resulted in several poorly designed products that do not meet the demand and have gained little traction with farmers.

The user-centered design approach puts farmers and their experience at the center of the product and service design, and is grounded on a continuous and structured interaction with end users. This approach helps to translate the solid understanding of users who are into a product and value proposition, and ensures that all aspects of the service — from the overall experience to each detailed feature — are verified with target users.

While exploring a complex value chain like agriculture, we believe that the GSMA mAgri Toolkit can effectively translate user-centered design into sustainable social impact.

Muhammad Farooq Shaikh, director digital services, Telenor Pakistan

By integrating a deep understanding of the user when designing or adapting an mAgri product, service providers can drive successful innovation in the mAgri sector and generate services that can be commercialized faster and become more widely adopted.
PRODUCT DEVELOPMENT CYCLE
The mAgri Design Toolkit displays a process together with a set of methods and tools to integrate user-centered design at any stage of the product development cycle.

The mAgri user-centered design process focuses on engaging the farmer at any stage of the product development, from the early moment of identifying the opportunities and generating concepts, to the advanced stages of product realization, execution, and scaling.

We can distinguish five moments in the user-centered design process, and map those against specific phases of the product development cycle.

1) The plan, learn, and create steps focus on building a foundational understanding of farmers and their ecosystem, preparing the team for field research (plan), gathering insights from users (learn), and transforming the data collected into opportunities and service ideas (create). The create step represents the transition from concept development to realization, dictating design and strategic decisions.

2) The develop stage looks at ways to extend the interaction with users during concept realization by providing tools and methods that allow the team to continuously evaluate the service idea, value proposition, and detailed features. The feedback collected is then used as input to refine the product execution and strategies.

3) After launch, the maintain phase evolves the tools and methods used during product realization to look at new design iterations and extensions of the product based on the actual user experience. The maintain phase also loops back into the planning phase, setting the stage for new cycles of research and idea generation.

It is important to note that this mAgri Design Toolkit does not cover other aspects that are critical to making an mAgri product successful (e.g., getting C-level buy-in). Please see the appendix for the suggested GSMA resources that should be used alongside this toolkit.
To apply a user-centered process, you need to first align on team setup, existing knowledge, and assumptions. Discuss the overall goal for your mAgri service and how to set up user research to ensure that farmers’ voices and their ecosystem are integrated into the mAgri service.

To create meaningful products, you need to be closer to user, market, and context of use. This understanding starts with going out in the field, asking the right questions, and testing hypotheses with farmers to guide you throughout the design process.

To develop a mAgri concept that is deeply rooted in insights captured in the field, you need to analyze the information collected, and identify the right opportunities for your mAgri service, considering all the diverse voices of the farmers and their ecosystem.

To shift from concept to realization, you need to prioritize features and plan how to create value, deliver, and capture it over time. While the product starts to take shape, organize additional validation sessions with the user to make sure you are going in the right direction.

The launch is only the beginning of the journey, not the goal. When the product launches, you need to continuously gather feedback from farmers and the ecosystem to refine and improve the product, looking at all the aspects that shape the final user experience.

<table>
<thead>
<tr>
<th>Phases</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAN</td>
<td>To apply a user-centered process, you need to first align on team setup, existing knowledge, and assumptions. Discuss the overall goal for your mAgri service and how to set up user research to ensure that farmers’ voices and their ecosystem are integrated into the mAgri service.</td>
</tr>
<tr>
<td>LEARN</td>
<td>To create meaningful products, you need to be closer to user, market, and context of use. This understanding starts with going out in the field, asking the right questions, and testing hypotheses with farmers to guide you throughout the design process.</td>
</tr>
<tr>
<td>CREATE</td>
<td>To develop a mAgri concept that is deeply rooted in insights captured in the field, you need to analyze the information collected, and identify the right opportunities for your mAgri service, considering all the diverse voices of the farmers and their ecosystem.</td>
</tr>
<tr>
<td>DEVELOP</td>
<td>To shift from concept to realization, you need to prioritize features and plan how to create value, deliver, and capture it over time. While the product starts to take shape, organize additional validation sessions with the user to make sure you are going in the right direction.</td>
</tr>
<tr>
<td>MAINTAIN</td>
<td>The launch is only the beginning of the journey, not the goal. When the product launches, you need to continuously gather feedback from farmers and the ecosystem to refine and improve the product, looking at all the aspects that shape the final user experience.</td>
</tr>
<tr>
<td>Tools</td>
<td>Preparation</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
<td><strong>Activities</strong></td>
</tr>
<tr>
<td>ORGANIZATION READINESS</td>
<td>SUCCESS CRITERIA</td>
</tr>
<tr>
<td>TEAM SETUP</td>
<td>MISSION COUNTDOWN</td>
</tr>
<tr>
<td>COLLABORATION TOOLS</td>
<td>HYPOTHESIS GENERATION</td>
</tr>
<tr>
<td></td>
<td>ECOSYSTEM MAPPING</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>DISCUSSION GUIDE</td>
<td>IN-DEPTH INTERVIEW</td>
</tr>
<tr>
<td>NOTE-TAKING TEMPLATE</td>
<td>FARMING LIFE CYCLE</td>
</tr>
<tr>
<td></td>
<td>TRUST CIRCLE</td>
</tr>
<tr>
<td></td>
<td>HOUSE-FARM TOUR</td>
</tr>
<tr>
<td></td>
<td>INTERCEPT INTERVIEW</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>USER ARCHETYPES</td>
<td>IDEATION EXERCISES</td>
</tr>
<tr>
<td>LIFE CYCLE MAPPING</td>
<td>CUSTOMER JOURNEY</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>USER VALIDATION PLAN</td>
<td>CARD SORTING</td>
</tr>
<tr>
<td></td>
<td>LOW-FIDELITY PROTOTYPES</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>MONITORING PLAN</td>
<td>CUSTOMER JOURNEY ISSUES</td>
</tr>
</tbody>
</table>
When to apply it

How the Design Toolkit can help you come up with a new service idea.

If you have not yet developed an mAgri service, or the product you have in the market has not been successful, the user-centered design process can help to build a deep understanding of farmers and the complex system of cultural, societal, financial dynamics they are part of. The learnings collected in the field become the foundation for your team to generate ideas for new mAgri services or to redesign the existing ones, giving the opportunity to always verify any design or strategic decisions against user insights.

Recommended tools:

Organization readiness, success criteria,
Ecosystem mapping, recruiting criteria,
Research plan, discussion guide, in-depth interview, intercept interview, research insights,
User archetypes, customer journey, value proposition, minimum viable product

How the Design Toolkit can help refine the product you are developing.

If you are developing a new mAgri service and you are unsure how it will be perceived in the market and generate adoption, the user-centered design process can help verify and adjust the product design and strategy before launch. You can test the mAgri service idea by creating rough prototypes of the service, evaluating the value proposition and prioritizing certain features with farmers, assessing the distribution strategy with all the actors in the ecosystem, and integrating your lessons into the product development process.

Recommended tools:

Ecosystem mapping, recruiting criteria,
User validation plan, discussion guide,
in-depth interview, card sorting, low-fidelity prototypes, trust circle, farming life cycle,
Content planning, agent training, go-to-market strategy, customer journey issues
Following a user-centered design approach does not guarantee a successful product; other factors need to be in place to get the desired outcome.

**INTERNAL BUY-IN**
Make sure you have the buy-in and support from the right people in your organization. mAgri products that don’t have C-level visibility and support often struggle.

**MARKET SIZE ASSESSMENT AND BUSINESS CASE**
Conduct a market sizing assessment and develop a business case for your mAgri service. This will be critical to get C-level and organizational buy-in.

**BUDGET**
Secure budget for the research and design process. After reading the toolkit, work out the budget required to do all the activities relevant for your stage of product development.

**PARTNERS**
Find the right partners to work with. MNOs and other mobile service providers need to partner with organizations that can bring the agriculture knowledge and support the research.
How to read the toolkit:

SECTION COVER

Each section opens with a description of the product development phase and a summary of the tools suggested for preparation, activities, and outcomes of the phase.

TOOL DESCRIPTION & INSTRUCTIONS

Each tool is described with indication of time, materials, complexity, and resources needs (on the left side) and detailed instructions (on the right side).

STORIES FROM THE FIELD

Some of the tools include real stories from the field that help put a specific tool into context and provide additional suggestions on how to apply it.

TOOL TEMPLATE

When needed, a blank worksheet or template is also provided: you can easily print out the worksheets you need and start practicing!
SHIFT FROM CONCEPT TO REALIZATION BY PRIORITIZING FEATURES AND PLANNING HOW TO CREATE VALUE, DELIVER, AND CAPTURE IT OVER TIME. WHILE THE PRODUCT STARTS TO TAKE SHAPE, ORGANIZE ADDITIONAL VALIDATION SESSIONS WITH THE USER TO MAKE SURE YOU ARE GOING IN THE RIGHT DIRECTION.

PREPARATION
Plan how to collect user feedback during the service development

USER VALIDATION PLAN

ACTIVITIES
Methods and tools that can help you collect feedback

CARD SORTING
LOW-FIDELITY prototypes

OUTCOMES
Methods and tools to adjust what you are doing

CONTENT CONSIDERATIONS
AGENT TRAINING
GO-TO-MARKET STRATEGY
DEVELOP

PREPARATION
Plan how to collect user feedback during the service development

USER VALIDATION PLAN
User Validation Plan

**Plan How You Want to Test the Product** so that you can validate your initial assumptions and make concrete suggestions for improvements.

**Time**
- 1 hour preparation;
- 1 hour for each interviewee

**Materials**
- Discussion guide
- Research materials
- Block notes
- Camera

**Complexity**
Low: good observation and moderation skills

**Roles**
- Interviewer
- Note-taker
- Photographer
PLAN TESTING SESSIONS
Refer to the overall project plan and schedule one or more user testing sessions that could help validate aspects such as value proposition and marketing strategy, content and service channel, registration, and pricing.

IDENTIFY OBJECTIVES, PARTICIPANTS, AND METHODS
Align the team around the key objective and discuss the type of participants you seek to interview. Think about how you are going to test the objectives: try to use stimuli or activities to provoke deeper conversations (e.g., paper phone prototypes).

PREPARE TESTING MATERIALS
Assess what type of materials you need to test the product. The product doesn’t need to be fully functional for testing. You can describe an idea in sketches that represent concepts, or screens simulated on paper, or rough static images of the interface visualized in the mobile screen.

PLAN HOW TO WRITE UP THE RESULTS
Think about which audience the user validation results are for (e.g., tech partner, PM, content partner). This will affect how detailed your user testing report needs to be and what you need to capture.
After having developed several potential ideas for new services, we wanted to determine which concepts were more desirable according to potential users. We created stories about people using each of the service concepts to explain to our participants not just the product idea, but also the need that it was addressing, how the customers could engage with the service, and which benefits they could get. The users could then give feedback and suggestions for each of the service ideas, choose their favorite, and define how much they would be willing to pay for it.

At the end of the user validation activity, we found that the favorite concepts for users were not the ones we assumed at the beginning. Moreover, we took away a lot of interesting features that we may now develop.

Apply user validation as a way to prioritize and enhance service ideas.

During the user validation, we could confirm a lot of insights collected during the foundational research.
The user validation challenged some of the initial assumptions we made about the pricing.

[Myat Hnin Phyu, Ooredoo UX expert]

Hopefully the results of the user validation will help us push the idea through the organization too.
Methods and tools that can help you collect feedback

ACTIVITIES

CARD SORTING

LOW-FIDELITY PROTOTYPES
Card Sorting

**DEVELOP / ACTIVITY**

**DURING EARLY VALIDATION SESSIONS, USE CARD-BASED ACTIVITIES TO ENSURE THE MVP IS ADDRESSING REAL USER NEEDS.**

**TIME**
30–60 minutes exercise

**MATERIALS**
Illustrated cards

**COMPLEXITY**
Low: basic moderation skills

**ROLES**
Interviewer
CREATE THE CARDS
If you have a list of possible features to include in a product, card sorting can be a good exercise to prioritize these features. Draw each feature on a separate card in the form of text (if literacy is not an issue) or with icons or simple storyboards.

SHOW THE CARDS TO THE USER
Identify the right moment for the card-sorting exercise during the in-depth interview. Place the cards in front of the participant so that he or she can see every card. Introduce them quickly one by one, while displaying the cards on the table or other surface.

ASK TO PRIORITIZE
Ask the participants to prioritize the cards that they need most. Put the cards that participants care about on the top and the ones they don’t care about at the bottom. The moderator should help move the cards around if participants are not comfortable doing so.

ASK WHY
The exercise is a trigger to dig deeper into some aspects. Once the participant has finished the prioritization, point to some of the cards that were selected and some of the cards that were not selected to understand the motivation behind it. Build a conversation around each of those (e.g., “Why is that important?” or “Why is that not important?”).
Low-fidelity Prototypes

Users may react differently to concepts than to products which embody them. **Rapidly and cheaply flesh out concepts to test and refine concrete ideas, even at an early stage.**

**Time**
90+ minutes (depending on the complexity)

**Materials**
- Basic art supplies
- Scissors and tape
- Existing IVR platforms

**Complexity**
Medium: good drawing skills

**Roles**
UX expert
FIND OUT WHAT COULD BE PROTOTyped

Review the hypothesis and determine what areas could be explored in prototypes. This method allows you to test and refine concepts in a disposable, easily documented format with low implementation skills and cost (e.g., draw mobile interfaces on paper to simulate a menu or an SMS, record your voice on your phone to simulate an IVR message, use solutions to self- build IVR menus quickly rather than going to your tech team).

CREATE THE LOW-FIDELITY PROTOTYPES

Using the materials available (paper for example), start sketching the concepts you have in mind. If you are working with paper, elements that move or change state should be on their own piece of paper.

BRING THE PROTOTYPES ALIVE

Think about creative ways to test the prototypes. For example, have someone record the voice of an audio message, simulate scrolling lists by cutting slots and running paper through it, simulate menus by using accordion folded to show their collapsed state, etc.

REFINE THEM OVER TIME

Trial key user interactions within the limits of the prototypes, and refine the interactions while going through the interview sessions. A huge advantage of low-fidelity prototypes is that they are easy to simulate and tweak in real time with users, and can be easily updated as needed.
We started to create the first paper prototypes during field research, and we continued across the different stages of the design process. The assumption was that the paper prototype was the most easy and intuitive way for the user to understand the interaction concept.

During the in-depth interviews, we wanted to cover all the different aspects of the service delivery, from registration to content access.

The paper prototypes were helpful to discuss the registration process, reviewing it with the users step by step, screen by screen.

The most important learning we developed through this activity is that the paper prototype is an evolving tool, that you need to be ready to rapidly change during the field activities. Every day.

Thanks to the prototypes, users could get almost the real experience of the product and were able to discuss pain points and benefits, providing additional ideas. Based on the feedback we could develop the mobile radio-like dynamics (which has not changed in the development) and re-think the payment process.
I got real feedback about what farmers really want and changed the design. [Maq, Grameenphone UX expert]

I’ll work with paper prototypes on any other future project.
Methods and tools that can help you adjust what you are doing
USER-CENTERED DESIGN WILL THROW UP INSIGHTS BEYOND PRODUCT DESIGN, INCLUDING CONTENT TIMING, TYPE, AND STYLE. **BE READY TO ENGAGE THE RELEVANT STAKEHOLDERS TO INCORPORATE THESE CONSIDERATIONS INTO YOUR DESIGN.**
USE THE IN-DEPTH INTERVIEWS TO GAIN INSIGHTS
Make sure to include the following aspects in the discussion guides you use for the in-depth interviews: what farmers do during the day, what information is relevant to them, what channels they prefer, and what content style they like. Then apply the following instructions to use the data collected to inform the mAgri service design.

DEFINE THE CONTENT FREQUENCY AND TIMING
Discuss the frequency and times of day when farmers have time to use the mAgri service (e.g., in the evening, after farmers are at home). Also, discuss what weeks during the entire season the farmers need more information (don’t assume it’s the same every month). Use this discussion to drive the timing discussion for the content-sharing strategy.

DEFINE WHAT TYPES OF CONTENT FARMERS CARE ABOUT
Be selective about what types of information you share with farmers, as they often have a lot of information already from many sources (e.g., TV, radio, friends, and input shop dealer). Discuss how the content on the service differentiates from the informal and formal information that farmers have access to already.

DEFINE WHAT PHONE CHANNELS TO USE
Identify which phone channels (e.g., SMS, OBD, and call center) farmers rely on, use, and trust the most for information. There may be different channels for different information needs. Also, if the service caters to different gender and age groups, consider how these channels may be different.

DEFINE THE IDEAL CONTENT STYLE
Consider what type of content style farmers would find most engaging and trustworthy for the content. Some cultures may appreciate more drama and fun dialog, while others would prefer more professional expert interviews for credibility. Review the trust circle exercise and see whether there are types of ecosystem players who could take part in shaping the content’s tone.
MARKETING AGENTS ARE CRITICAL IN ENGAGING FARMERS WHO UNDERSTAND, TRUST, AND BECOME LOYAL USERS OF THE SERVICE. **DEFINE THE AGENTS’ ROLE AND HOW TO TRAIN THEM.**

**DEVELOP / PREPARATION**

**TIME**
3-4 hours working session

**MATERIALS**
Training materials

**COMPLEXITY**
High

**ROLES**
- Sales
- UX expert
- Agent representative
DEVELOP / ACTIVITY

AGENT TRAINING & PLANNING INSTRUCTIONS

1. DECIDE WHO THE AGENTS SHOULD BE
   Refer back to the Trust Circle exercise to discuss if any of the key players in the ecosystem could become the agent. Once the role has been decided, determine the selection criteria of how agents should be selected.

   RECOMMENDATION: BEYOND FINANCIAL INCENTIVES, PROVIDE OTHER INCENTIVES THAT MAKE THE AGENTS FEEL A SENSE OF PRIDE FOR BEING PART OF THE mAgri SERVICE SUCH AS BRANDED CLOTHING.

2. ANALYZE THE REGISTRATION PROCESS IN DETAIL
   The registration process is the first time farmers experience the service. Take time to discuss how the registration process should be (e.g., Is it individual or group registration?) and how to integrate agents educating farmers about the service.

3. SET UP TRAINING AND QUALITY CHECKS FOR AGENTS
   The agents will need to be experts about the mAgri service.
   The training program for agents will need to give the agents a complete overview of the service. Beyond training, discuss mechanisms to check on the quality of agents to ensure they are providing the right information for farmers and advocating the mAgri service properly.

4. ALIGN ON THE INCENTIVES SCHEME FOR AGENTS
   As the agent’s responsibilities are quite broad and beyond a quick transaction, the incentives for agents are important to ensure they take the role seriously. Discuss different ways to motivate agents to want to educate farmers, answer their questions after registration, and resubscribe them to the service.

SOME POPULAR CHOICES FOR mAgri SERVICE AGENTS HAVE BEEN SUCCESSFUL FARMERS AND GOVERNMENT EXTENSION OFFICERS

SOME POPULAR CHOICES FOR mAgri SERVICE AGENTS HAVE BEEN SUCCESSFUL FARMERS AND GOVERNMENT EXTENSION OFFICERS

RECOMMENDATION: BEYOND FINANCIAL INCENTIVES, PROVIDE OTHER INCENTIVES THAT MAKE THE AGENTS FEEL A SENSE OF PRIDE FOR BEING PART OF THE mAgri SERVICE SUCH AS BRANDED CLOTHING.
BRING TOGETHER ALL STAKEHOLDERS WHO WILL BE INVOLVED IN MARKETING THE SERVICE TO DEFINE HOW TO MARKET THE SERVICE TO FARMERS BASED ON THE INSIGHTS GENERATED IN THE FIELD.

**TIME**
3-4 hours working session

**MATERIALS**
Current marketing strategy

**COMPLEXITY**
High

**ROLES**
- Marketing team
- UX expert

**DEVELOP / OUTCOME**

Go-to-Market Strategy
ENSURE MARKETING UNDERSTANDS THE FARMERS’ VOICES
The foundation for a strong awareness strategy is that the marketing team understands the farmers’ needs and their context. If the marketing team has not gone into the field for user testing, then ensure the team is aware about all the past field reports and the context.

ALIGN MARKETING MESSAGES AND VALUE PROPOSITION
Make sure that all the messaging about the mAgri service reflects the aspirational value proposition that was developed. This can help bring further trust and motivation for farmers to learn more about the service.

INVOLVE THE FARMERS’ COMMUNITY
Find out about key community events that are important for farmers and build on these events for the awareness campaign. Identify key community leaders who would be able to advocate for the service to help gain further trust from farmers on the service.

PLAN THE EVENT TIMING CONSIDERING THE FARMING CYCLE
Ensure that the awareness efforts coincide well with the crop seasons. Ideally, the products are launched at the beginning of a crop season. If this timing is not possible, then consider the seeding and growing stages of the cycle and avoid the busy harvest seasons.
The way in which we approached the go-to-market strategy was by relying on the sales agents and lead farmers as key advocates for our product, based on the level of trust they have in the farmers’ ecosystem.

We believed that the best way to get people on board was going to be through individual sales with sales agents. We also believed that the training of sales agents and lead farmers would have been relatively easy. With these assumptions in mind, we organized the first training.

A few days before the event, a local in the community organized farmers by creating a notice to organize our arrival. By the time the Vodafone Farmers Club team arrived, there were a lot of people waiting.

At that point, we realized that engaging people as a group was much more beneficial than involving single individuals. But we needed a group sales strategy to make it a quick and friendly user experience.
In fact, during the group training with sales agents and lead farmers, a lot of questions were raised, clearly demonstrating that the manual needed to be easier to understand for our audience. The training with the sales agents and lead farmers needs to be intensive, and enable them to convey the right message to the farmers.

Training a group is of course different from training a single user. We needed to adapt.

[Nana, Vodafone Ghana product owner]
**PLAN**  
To apply a user-centered process, you need to first align on team setup, existing knowledge, and assumptions. Discuss the overall goal for your mAgri service and how to set up user research to ensure that farmers’ voices and their ecosystem are integrated into the mAgri service.

**LEARN**  
To create meaningful products, you need to be closer to user, market, and context of use. This understanding starts with going out in the field, asking the right questions, and testing hypotheses with farmers to guide you throughout the design process.

**CREATE**  
To develop a mAgri concept that is deeply rooted in insights captured in the field, you need to analyze the information collected, and identify the right opportunities for your mAgri service, considering all the diverse voices of the farmers and their ecosystem.

**DEVELOP**  
To shift from concept to realization, you need to prioritize features and plan how to create value, deliver, and capture it over time. While the product starts to take shape, organize additional validation sessions with the user to make sure you are going in the right direction.

**MAINTAIN**  
The launch is only the beginning of the journey, not the goal. When the product launches, you need to continuously gather feedback from farmers and the ecosystem to refine and improve the product, looking at all the aspects that shape the final user experience.
<table>
<thead>
<tr>
<th>PREPARATION</th>
<th>ACTIVITIES</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANIZATION READINESS</td>
<td>SUCCESS CRITERIA</td>
<td>RECRUITING CRITERIA</td>
</tr>
<tr>
<td>TEAM SETUP</td>
<td>MISSION COUNTDOWN</td>
<td>RESEARCH PLAN</td>
</tr>
<tr>
<td>COLLABORATION TOOLS</td>
<td>HYPOTHESIS GENERATION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECOSYSTEM MAPPING</td>
<td></td>
</tr>
<tr>
<td>DISCUSSION GUIDE</td>
<td>IN-DEPTH INTERVIEW</td>
<td>RESEARCH INSIGHTS</td>
</tr>
<tr>
<td>NOTE-TAKING TEMPLATE</td>
<td>FARMING LIFE CYCLE</td>
<td>Refined Hypotheses</td>
</tr>
<tr>
<td></td>
<td>TRUST CIRCLE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HOUSE-FARM TOUR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INTERCEPT INTERVIEW</td>
<td></td>
</tr>
<tr>
<td>USER ARCHETYPES</td>
<td>IDEATION EXERCISES</td>
<td>VALUE PROPOSITION</td>
</tr>
<tr>
<td>LIFE CYCLE MAPPING</td>
<td>CUSTOMER JOURNEY</td>
<td>SERVICE BLUEPRINT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MINIMUM VABLE PRODUCT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADVOCATE &amp; SKEPTICS MAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BUSINESS MODEL</td>
</tr>
<tr>
<td>USER VALIDATION PLAN</td>
<td>CARD SORTING</td>
<td>CONTENT CONSIDERATIONS</td>
</tr>
<tr>
<td></td>
<td>LOW-FIDELITY PROTOTYPES</td>
<td>AGENT TRAINING</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GO-TO-MARKET STRATEGY</td>
</tr>
<tr>
<td>MONITORING PLAN</td>
<td>CUSTOMER JOURNEY ISSUES</td>
<td>PRODUCT ITERATIVE PLANNING</td>
</tr>
</tbody>
</table>
Further reading on Agri VAS

**MARKET OPPORTUNITY AND BUSINESS CASE**

**Agricultural value-added services (Agri VAS): market opportunity and emerging business models (2015)**
Estimates the size of the potential Agri VAS market in South Asia and Sub-Saharan Africa and presents an in-depth analysis of the business models in the market today.

**Agricultural machine-to-machine (M2M): a platform for expansion (2015)**
GSMA investigates the opportunity for mobile operators in the Agricultural M2M space.

**TECHNOLOGY**

**Guidelines for agricultural call centers (2014)**
Lays out a step-by-step process for establishing an agricultural call center.

**Agri VAS functional requirements and best practice: SMS & IVR (2014)**
Outlines the different types of Agri services that can be delivered with SMS and IVR, common pitfalls, and best practices.
**CONTENT**

**Mobile market information for Agri VAS operators: a quick start guide (2013)**
Applying the concept of market information systems to mobile delivery service channels.

**Guidelines for creating agricultural VAS content (2013)**
A guide to understanding the scale and scope of different agricultural content requirements and a step-by-step process to deliver against them.

**PRODUCT & MARKETING**

**Women in Agriculture: a toolkit for mobile services practitioners (2014)**
Outlines the case and considerations for designing an Agri service “through a gender lens.”

**Mobile user analytics: a case study in mAgrí (2014)**
This guest study from the M4D Impact team discusses the value of user analytics for improving mobile agriculture services.
AGRI VAS

**Agricultural Value Added Services (Agri VAS): Market Entry Toolkit (2011)**

This comprehensive document explores the opportunities for Agricultural VAS and covers emerging best practices on marketing, service design, and business modeling.

mAgri CASE STUDIES

Outlining progress and best practices in mobile agriculture services.

**Vodafone Turkey Farmers’ Club (2015)**
An Agri-VAS and bundled service

**Airtel Green SIM (2015)**
An Agri-VAS service in India

mFarmer case studies and deep dive analyses of Tigo Kilimo, Airtel Kilimo, Orange’s Sènèkèla and Handygo’s mKisan services, co-funded by the mAgri team under the mFarmer initiative (2014-15)

**Micro-insurance in mobile agriculture (2015)**
Analysis of ACRE, a Kenyan micro-insurance product for farmers

**mKilimo (2011)**
An agricultural call center funded by the mAgri Program
THANKS TO...

mAgri Design Toolkit authors
Brandon Edwards, frog
Roberta Tassi, frog
Lilian Tse, frog
Mohammad Ashrafuzzaman, GSMA
Victoria Clause, GSMA
Nicole Darabian, GSMA
Amol Jadhav, GSMA
Tegan Palmer, GSMA
Natalia Pshenichnaya, GSMA
Daniele Tricarico, GSMA

mAgri Design Toolkit contributors
Tawonga Kayira, Airtel Malawi
Khumbo Phiri, Airtel Malawi
Dela Kumahor, Cobalt Consulting
Diana Akrong, Cobalt Consulting
Inas Jenabdeen, Dialog
Sathyan Velumani, Dialog
Ihan Cheng, frog
Jennifer Dunnam, frog
Katie Inglis, frog
Siddharta Lizcano, frog
Alvaro Marquez, frog
Kara Pecknold, frog
Fabio Sergio, frog
Hammans Stallings, frog
Alessandra Valenti, frog
Simone Wittmann, frog
Sumaiya Sadia Raihan, Grameenphone
Myat Hnin Phyu, Ooredoo
Tanya Rochelle Rabourn, Ooredoo
Kashif Malik, Telenor Pakistan
Abdullah Saqib, Telenor Pakistan
Nana Yaa Oti-Boateng, Vodafone Ghana
Mostaque Ahammed, WinMiaki