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: @GSAMA4d

frog

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 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.

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

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.
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

- CONCEPT REALIZATION
  - CREATE
  - DEVELOP
  - PLAN
  - LEARN
  - MAINTAIN
- EXECUTION & SCALING
  - START
  - LAUNCH
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.
# Tools

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Activities</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization Readiness</strong></td>
<td><strong>Success Criteria</strong></td>
<td><strong>Recruiting Criteria</strong></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><strong>Discussion Guide</strong></td>
<td><strong>In-depth Interview</strong></td>
<td><strong>Research Insights</strong></td>
</tr>
<tr>
<td>Note-taking Template</td>
<td>Farming Life Cycle</td>
<td>Refined Hypotheses</td>
</tr>
<tr>
<td><strong>User Archetypes</strong></td>
<td><strong>Ideation Exercises</strong></td>
<td><strong>Value Proposition</strong></td>
</tr>
<tr>
<td>Life Cycle Mapping</td>
<td>Customer Journey</td>
<td>Service Blueprint</td>
</tr>
<tr>
<td><strong>User Validation Plan</strong></td>
<td><strong>Card Sorting</strong></td>
<td><strong>Minimum Viable Product</strong></td>
</tr>
<tr>
<td></td>
<td>Low-fidelity Prototypes</td>
<td>Advocate &amp; Skeptics Map</td>
</tr>
<tr>
<td><strong>Preparation Activities Outcomes</strong></td>
<td><strong>Content Considerations</strong></td>
<td><strong>Business Model</strong></td>
</tr>
<tr>
<td><strong>Preparation Activities Outcomes</strong></td>
<td><strong>Agent Training</strong></td>
<td><strong>Go-to-market Strategy</strong></td>
</tr>
<tr>
<td><strong>Preparation Activities Outcomes</strong></td>
<td><strong>Monitoring Plan</strong></td>
<td><strong>Product Iterative Planning</strong></td>
</tr>
<tr>
<td><strong>Preparation Activities Outcomes</strong></td>
<td><strong>Customer Journey Issues</strong></td>
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</table>
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
HOW TO PREPARE

Following a user-centered design approach does not guarantee a successful product; other factors need to be in place to get the desired outcome.

**IT IS IMPORTANT TO CONSIDER THESE FACTORS WHEN YOU ADOPT A USER-CENTRED DESIGN APPROACH FOR YOUR mAgri SERVICE:**

1. **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.

2. **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.

3. **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.

4. **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.
GET READY TO START!

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!
PLAN

ALIGN ON THE OVERALL GOAL FOR YOUR mAgrl SERVICE AND SET UP THE USER RESEARCH TO ENSURE FARMERS’ VOICES AND THEIR ECOSYSTEM ARE INTEGRATED INTO THE mAgrl SERVICE. REMEMBER TO CHECK BACK OFTEN ON THE GOAL AND RESEARCH, AS YOU CAN KEEP ITERATING ON THESE WHEN YOU LEARN MORE ABOUT WHAT FARMERS WANT AND NEED.

PREPARATION
Make sure you have the right resources in place

ORGANIZATION READINESS
TEAM SETUP
COLLABORATION TOOLS

ACTIVITIES
Align on your goals and understanding of the mAgrl service

SUCCESS CRITERIA
MISSION COUNTDOWN
HYPOTHESIS GENERATION
ECOSYSTEM MAPPING

OUTCOMES
Setup qualitative research with farmers and their ecosystem

RECRUITING CRITERIA
RESEARCH PLAN
PLAN

☑️ PREPARATION

Make sure you have the right resources in place

ORGANIZATION READINESS

TEAM SETUP

COLLABORATION TOOLS
As user-centered design is not a “business as usual” process for many MNOs and VAS providers, it’s important to assess your organization’s ability to follow the approach and identify areas that require more resources or attention. Some key areas which MNOs may find new or unusual include the increased interaction with end users, intensity of collaboration with internal and external teams, and the iterative approach to product development.

**MAKE SURE THE RIGHT SETUP AND RESOURCES ARE IN PLACE** BY ASSESSING THE INTERNAL ENABLERS AND BLOCKERS BEFORE STARTING THIS PROCESS.
ORGANIZE A MEETING
Set up an internal meeting with representatives from all the structures working in the organization (e.g., tech team, marketing team, content team, user experience designers, product managers, partners, etc.) to explain the user-centered approach and collect all their input about organization readiness.

IDENTIFY THE INTERNAL ENABLERS & BLOCKERS
Take 10 minutes individually to reflect on the existing enablers: what are the internal factors that could facilitate the adoption of a user-centered design approach (e.g., “We just hired a UX expert”)? Write each of them on a Post-it and then share with the team.
Repeat the same process to identify the blockers: what are the internal factors that could be an obstacle to the development of a product based on a user-centered design approach (e.g., “The tech team works in isolation”)? Write each blocker on a Post-it and then share with the team.

THINK OF ACTIONS THAT CAN IMPROVE READINESS
Discuss the clusters of enablers and blockers that emerged, qualifying the readiness of the organization to adopt a user-centered design methodology. Find solutions to solve any potential issues.

ENSURE C-LEVEL BUY-IN IS SECURED
If getting C-level buy-in didn’t come up in the enablers and blockers exercise, ensure there is a plan to secure the C-level buy-in for the project. Define who is your C-level sponsor and plan for how to brief and involve him or her throughout the project.
Team Setup

**PLAN / PREPARATION**

To get the most out of following a user-centered design approach, the make up of the product team may need to be different from the norm. Establish a team with people from different departments (e.g., marketing, business intelligence) and partner organizations (e.g., content partners, vendors).

**UNDERSTAND WHAT THE TEAM MEMBERS’ SKILLS AND MOTIVATIONS ARE** AND IDENTIFY ANY GAPS IN EXPERTISE.

**TIME**
30-60 minutes workshop exercise

**MATERIALS**
- Worksheet
- Pens
- Tape

**COMPLEXITY**
Low: basic collaborative skills

**PARTICIPANTS**
- Project manager
- UX lead
- Technology
- Marketing
- Content
REFLECT ON YOUR PERSONAL SKILLS AND MOTIVATIONS

Each person fills out a Team Setup worksheet (or writes on a blank piece of paper) describing his or her working style, personal goals for the project, the skills he or she might use, and individual development goals and needs outside of the project.

SHARE WITH THE TEAM

Once everyone has completed the Team Setup worksheet, team members can read their answers aloud to the group. Listen carefully to the goals and opinions of each participant and seek ways to help members meet their goals throughout the program.

IDENTIFY EXPERTISE AND GAPS

Openly discuss the skills that emerged to assess the team’s expertise and any potential gaps. Team members can work all together in front of a whiteboard or a blank piece of paper. List all the expertise of the team and the gaps, and then discuss team roles and ways to address any gaps.

KEEP YOUR TEAM NORMS ON THE WALL

Together, shape team norms for working and collaboration that reflect the alignment on individual skills plus team expertise and gaps. Record the team norms on a large piece of paper and stick it to the wall of your project room, to reference while working together.
We started by analyzing a high-level product road map and listing all the internal teams that were relevant at each stage of the road map. For example, we recognized that in the development phase the tech team would have been key, while in the go-to-market phase the marketing team would have become more important.

Based on that analysis, when we set up the first team for the initial phases of field research, we tried to form a core team with representatives from all the functions (UX, marketing, and technology), but we didn’t manage to have them involved. We thought it was fine, because we could have involved them later in the process. However, this actually turned out to be a problem.

We now have to keep sharing the user perspective and suggest changes to the materials that marketing proposes based on the insights we have on farmers. This consumes a lot of our energy, as we must fill a gap that could have been easily avoided by having them participate in the field research.
It’s important to get the core team together starting from the initial stage, especially research. In particular, people from the marketing department are key, as they create the materials targeted for farmers.

I am now trying my best to get other teams joining us in the field.

[Inas, Dialog product manager]
TEAM SETUP WORKSHEET
Reflect on your personal skills and motivations

01 MY PERSONALITY

Extrovert? Introvert? Systems thinking or details first? Structured or spontaneous?

02 MY GOALS MY SKILLS

What do you want to learn from this project? What skills do you wish to apply during this project?

03 IN MY OPINION...

What do you feel is most important for the success of this project?
Reflect on your personal skills and motivations

MY PERSONALITY

IN MY OPINION...

Extrovert? Introvert? Systems thinking or details first? Structured or spontaneous?

What do you feel is most important for the success of this project?

01

MY GOALS MY SKILLS

What do you want to learn from this project? What skills do you wish to apply during this project?

02

03
Collaboration Tools

**PLAN / PREPARATION**

Coordinating the product development across a team that is made up of different organizations and departments requires effective collaboration tools.

**DEFINE TOOLS AND PROCEDURES TO SUPPORT THE INTERNAL COLLABORATION AND A CONTINUOUS SOCIALIZATION OF PROJECT MATERIALS.**

**TIME**

1-day setup and then continuous usage

**MATERIALS**

- Confluence
- (or) Basecamp
- (or) Tumblr
- (or) email

**COMPLEXITY**

Low: define rules and adapt an existing platform

**PARTICIPANTS**

- All team members (internal and external)
- One platform admin
DEFINE YOUR COLLABORATION OBJECTIVES
Understand the internal needs and expectations of project collaboration in terms of information exchanged, frequency of use, types of users (restricted versus extended team), and support of remote communication.

CHECK EXISTING TOOLS
Evaluate alternative solutions based on the identified needs. You can go from advanced collaboration applications — such as Confluence or Basecamp — to platforms that better support one-to-many exchanges — such as Tumblr or WordPress blogs.

CUSTOMIZE A PLATFORM TO YOUR NEEDS
Once you have picked the tool that best fits your goals, make it your own by structuring it around specific rules and workflows. Customize the visual, as well as the navigation and categorization, to facilitate its use by others.

USE IT!
Before sharing the tool with everybody, add existing content as a way to show how to use it and to engage people both in reading and uploading materials and in using the platform for information exchange. This is particularly important if your collaboration tool is a blog.

IF YOU ARE WORKING WITH EXTERNAL PARTIES, INVITE THEM TO USE YOUR COLLABORATION PLATFORM TO EASE COMMUNICATION

SETTING UP A PLATFORM DOESN’T MEAN THAT EVERYBODY WILL IMMEDIATELY USE IT. BE PATIENT AND SEND REMINDERS!
PLAN

ACTIVITIES
Align on your goals and understanding of the mAgri service

SUCCESS CRITERIA
MISSION COUNTDOWN
HYPOTHESIS GENERATION
ECOSYSTEM MAPPING
Success Criteria

PLAN / PREPARATION

Getting the whole team, including the C-level, to agree on the goals for the product (both for business and user impact) is an important first step in defining the key performance indicators (KPIs) for the product.

ALIGN ON A SHARED SET OF GOALS FOR THE PROJECT THAT CONSIDERS BOTH BUSINESS OBJECTIVES AND FARMER-IMPACT OBJECTIVES.

TIME
60 minutes workshop exercise

MATERIALS
• Example cards
• Post-it notes
• Markers

COMPLEXITY
Low: basic collaboration skills

PARTICIPANTS
• Project manager
• UX lead
• Technology
• Marketing
• Content
WHAT ARE YOU TRYING TO ACHIEVE?
Have each participant write down his or her top three business objectives and top three farmer-impact objectives for the mAgri service. Use different Post-it note colors for business and user objectives.

SHARE WITH THE TEAM
Each participant comes to the front of the room and shares his or her top three farmer-impact and top three business objectives with the team. Have participants add their Post-it notes to a large sheet of paper (create two separate columns, one for each category).

VOTE ON THE SUCCESS CRITERIA
Give each person three votes to apply across all the success criteria for both business and farmer impact objectives. The individual votes let everybody express his or her own preferences and generate alignment on what the most relevant criteria are.

FINALIZE YOUR LIST OF SUCCESS CRITERIA
As a team, create a well-defined, prioritized list under each category (objectives and success criteria). Hang both lists in the team room and ensure the success criteria are used later as an evaluation tool (success metrics) for the mAgri concepts.
During the workshop, we gathered key representatives across different functions in the room to brainstorm around the success criteria of the project. This was the first time we had everyone discuss their goals for the project.

We had a lively discussion and debate about the success criteria. We thought that everyone would easily agree on the business goals, but it was surprising to see that everyone had different goals for both the business and user success metrics.

This was an important exercise to align across the different business units at Vodafone and share our assumptions about the program.

A suggestion about voting: Make sure that each business unit has an equal number of votes. Don’t just give a voting dot; assign proportional voting to balance the relevance of the criteria across the different structures of the organization.
The voting results were surprising. People really cared about the farmer-impact results, and not just the commercial ones. Realizing that helped set the tone for the project.

[Vodafone, product manager]

**PRODUCT SUCCESS CRITERIA: VODAFONE GHANA EXAMPLE**

1. INCREASED REVENUE
2. BRAND VISIBILITY AND AFFINITY
3. GROWTH OF ACTIVE RURAL CUSTOMERS MONTH BY MONTH
4. INCREASED FARMER PRODUCTIVITY AND INCOME
5. ACCESSIBLE AND USABLE INFORMATION
6. A FOCUS ON GENDER
<table>
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<tr>
<th>BUSINESS OBJECTIVE</th>
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<tr>
<td>Increase rural market share, penetration</td>
<td>Improve human-centered design capabilities</td>
<td>Become knowledge leader of mAgri</td>
<td>Improve outcome focus (monitoring &amp; evaluation)</td>
<td>Increase number of repeat users in rural areas</td>
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<td>Pay revenue touch points per rural user</td>
<td>Increase rural Valley Agricultural Software (VAS) usage</td>
<td>Become a leader in mAgri product</td>
<td>Drive higher adoption of core service in rural areas</td>
<td>Reduce cost of servicing customers</td>
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<td>Increase brand loyalty in rural areas</td>
<td>Increase level of innovation inside the organization</td>
<td>Increase active users in rural areas</td>
<td>Competitive differentiation (with local or global brands)</td>
<td>Add your own business objective</td>
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<td>Farmer-Impact Objective</td>
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<td>Improve farmer health</td>
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<td>Reduce crop wastage</td>
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<td>Reduce price volatility</td>
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<td>Improve overall flow of information for farmers</td>
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<td>Improve usability of mAgri information</td>
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<td>Improve farmer, agri-business &amp; government relationship</td>
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<td>Increase farmer income</td>
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<td>Improve farmer nutrition</td>
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<td>Improve farmer control over farm</td>
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<td>Improve farmer education level</td>
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<td>Improve farmer relationship with community</td>
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<tr>
<td>Provide better access to information (agri- or nonagri-related)</td>
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<td>Women and maternal health improvement</td>
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<td>Improve access to finance (loans)</td>
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<td>Add your own farmer-impact objective</td>
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Mission Countdown

CREATE A MEMORABLE STATEMENT THAT REPRESENTS THE SHARED GOALS FOR THE PRODUCT AND CAN BE SHARED ACROSS THE BUSINESS AND PARTNERS.

TIME
45 minutes workshop exercise

MATERIALS
• Worksheet
• Markers

COMPLEXITY
Low: basic collaboration skills

ROLES
• Project manager
• UX lead
• Technology
• Marketing
• Content
### WHAT IS THE PROJECT GOAL?

Begin this activity with an existing mission statement or goal document. Divide the team into small groups (three to four people each) and give them an existing statement defining the project goal. Explain the dynamics of the exercise and encourage “stealing” good ideas from the other groups.

### REDUCE THE GOAL STATEMENT TO 16 WORDS

In the first 16 minutes, each group discusses the goal and shares perspectives on the challenges they may encounter. **Reduce the mission statement to 16 words and write it on the worksheet or paper,** focusing on what is most relevant when describing the overall objective.

### REDUCE IT AGAIN, AND AGAIN

*Over the next 8 minutes, teams reduce their mission statements to 8 words,* further refining the essence of the mission. **After another 2-minute read-out, teams reduce their mission statement to 4 words.** They have only 4 minutes this time.

### SELECT THE MOST EFFECTIVE STATEMENT

**In the final 10 minutes, discuss the statements and the focal areas that emerged through reducing them step by step.** Select the statement that best expresses your mission; it should be complete enough to provide meaning and essential enough to be memorable.

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<tr>
<th>Mission</th>
<th>Notes</th>
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<tr>
<td></td>
<td>16 words</td>
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<td>8 words</td>
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<td>4 words</td>
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**EXAMPLE:**

*OUR MISSION IS TO USE MOBILE TECHNOLOGY TO TRANSFORM FARMING*
Quickly iterate and refine your mission statement into a memorable phrase.

WRITE A MISSION STATEMENT OF NO MORE THAN 16 WORDS

OUR MISSION IS TO: ___________________________________________

IN ORDER TO: ________________________________________________

FOR: _______________________________________________________

REVISE YOUR MISSION STATEMENT TO NO MORE THAN 8 WORDS

OUR MISSION IS TO: ___________________________________________

IN ORDER TO: ________________________________________________

FOR: _______________________________________________________

REVISE YOUR MISSION STATEMENT TO NO MORE THAN 4 WORDS

OUR MISSION IS TO: ___________________________________________

IN ORDER TO: ________________________________________________

FOR: _______________________________________________________

MISSION COUNTDOWN WORKSHEET
REVISE YOUR MISSION STATEMENT TO NO MORE THAN 4 WORDS

MISSION COUNTDOWN

WORKSHEET

Quickly iterate and refine your mission statement into a memorable phrase

WRITE A MISSION STATEMENT OF NO MORE THAN 16 WORDS

OUR MISSION IS TO:

IN ORDER TO:

FOR:

REVISE YOUR MISSION STATEMENT TO NO MORE THAN 8 WORDS

OUR MISSION IS TO:

IN ORDER TO:

FOR:
IDENTIFY THE ASSUMPTIONS AND HYPOTHESES THAT YOUR TEAM HAS ABOUT FARMERS’ NEEDS. THESE MUST BE TESTED AND VALIDATED DURING THE RESEARCH.

**Hypothesis Generation**

**PLAN / ACTIVITY**

**IDENTIFY THE ASSUMPTIONS AND HYPOTHESES** THAT YOUR TEAM HAS ABOUT FARMERS’ NEEDS. THESE MUST BE TESTED AND VALIDATED DURING THE RESEARCH.

**TIME**
30 minutes workshop exercise

**MATERIALS**
- Worksheet
- Post-it notes
- Pens

**COMPLEXITY**
Medium: good envisioning and strategic skills

**PARTICIPANTS**
- Project manager
- UX lead
- Technology
- Marketing
- Content
IDENTIFY UNMET USER NEEDS
Review any previous data gathered (if available) and write down key assumptions about unmet needs that you think farmers have. For example, “Farmers don’t have access to accurate price information.”

IDENTIFY REASONS FOR FARMERS’ NEEDS
Write down why you think farmers have these unmet needs. For example, “Farmers don’t have access to accurate prices because radio information is for the whole country and not specific to their village.”

USE THE HYPOTHESIS TO BUILD THE RESEARCH
Discuss with the team how you want to test these hypotheses during field research. This usually gives a good starting point to write the discussion guide used to interview farmers.
01 ASSUMPTIONS
WHAT ARE KEY ASSUMPTIONS ABOUT FARMERS' NEEDS TODAY?
E.g., farmers don’t have access to accurate pricing information

02 MOTIVATIONS
WHAT ARE KEY REASONS BEHIND THOSE NEEDS?
E.g., what are different ways you get pricing information?
Is getting accurate market prices important to you?

03 KEY QUESTIONS
CIRCLE A FEW HYPOTHESES TO TEST THROUGH RESEARCH
E.g., hypothesis 1: farmers in rural areas have unreliable access to market information.
Hypothesis 2: farmers value real-time pricing information for better decision-making.

Identify key assumptions and hypotheses about farmers' needs
HYPOTHESIS GENERATION

WORKSHEET

Identify key assumptions and hypothesis about farmers' needs

E.g., farmers don't have access to accurate pricing information

01 ASSUMPTIONS

WHAT ARE KEY FARMER NEEDS FOR mAgri TODAY?

E.g., farmers don't have access to price information because radio information is for the whole country and not accurate on a village level

02 MOTIVATIONS

WHAT ARE KEY REASONS BEHIND THOSE NEEDS?

E.g., what are different ways you get pricing information?

Is getting accurate market prices important to you?

03 KEY QUESTIONS

CIRCLE A FEW HYPOTHESES TO TEST THROUGH RESEARCH
Ecosystem Mapping

IDENTIFY ALL THE ACTORS WHO HAVE AN INFLUENCE ON THE FARMER, TO FULLY UNDERSTAND THE STAKEHOLDERS WHO MUST BE CONSIDERED AS YOU DESIGN THE PRODUCT AND PLAN THE RESEARCH.

TIME
30 minutes workshop exercise

MATERIALS
- Blank paper
- Ecosystem cards
- Pens

COMPLEXITY
High: good understanding of systemic dynamics

PARTICIPANTS
- Project manager
- UX lead
- Technology
- Marketing
- Content

TIP: SPLIT THE WIFE AND HUSBAND ROLES IN THE MAP. DON'T CONSIDER THEM AS A SINGLE ENTITY, SINCE THEY MAY HAVE DIFFERENT TASKS, NEEDS, AND RELATIONSHIPS WITH THE OTHER ACTORS IN THE ECOSYSTEM.
LIST ALL THE COMPONENTS
The ecosystem map is primarily organized around actors and touch points. List all the elements involved in the existing service delivery and prepare a simple card for each. You can use Post-its of different colors to represent actors and touch points.

DRAW CONNECTIONS
Place the cards on a board and start creating the connections. Connections can be based on exchanges of money, information, resources, values, etc. Draw different types of lines to describe the different types of relationships.

HIGHLIGHT GAPS AND PAIN POINTS
Use a Post-it of a different color to identify elements you don't have enough information about or pain points in the system. This lets you know what kinds of information need to be further explored and verified during the field research.

FIRST DRAFT!
Review the entire map to verify its completeness. You can use it as a starting point to identify research target participants during the planning phase, map your insights during the field research, and finally communicate your learnings afterward.
At the very beginning, we were absolutely convinced that Airtel could take the product directly to the farmers through the conventional go-to-market strategies that have been applied to many other products. The assumption was that different sources of information would have reached the different types of farmers, covering a good range of the spectrum.

At that point, we did the ecosystem mapping exercise to understand a bit better the different players involved and get ready for the research.

We used a set of cards, named with different population groups and roles in the society. We mapped their connections and importance for the farmers, who represent our target market.

During the mapping activity, we identified the links between the different players in the ecosystem and reflected on how they influence each other either economically or in the decision process.

The ecosystem map helped reveal who farmers trust for information and key influencers to engage in the mAgrí service.

AEDOs* and lead farmer networks are the primary change agents but lack resources. [UX team, research insight]

* Department of Agriculture Extension Services
Through the exercise, we identified that other farmers play a critical role in sharing information. We then tested this in the field, and found that the lead farmers are actually the most trusted source of information. This insight completely changed our go-to-market (GTM) strategy. Instead of using Airtel agents, we decided to rely on lead farmers to promote the product.

In conclusion, the insights about the ecosystem made the role of the lead farmers strategic in the GTM definition.

The ecosystem mapping exercise was critical to understanding that the mAgri service is not just about Airtel and the farmer. The exercise forced us to more broadly think about other key players we can leverage for the GTM strategy.
Use the ecosystem cards as input for the ecosystem mapping exercise.

- Supplier
- Fertilizer Seller
- Extension Officer
- Agridealer
- Seed Seller
- Distributor
- Middlemen / Trader
- Moneylender
- MONO
- Farmers Group
- Agri Expert
- Government
- Farmer
- Local Store
- Bank
<table>
<thead>
<tr>
<th>Ecosystem Cards</th>
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<tbody>
<tr>
<td>Community Leader</td>
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<tr>
<td>Storage Facility</td>
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<td>Child</td>
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<td>Hospital</td>
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<tr>
<td>Wife</td>
<td></td>
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<tr>
<td>Traditional Market</td>
<td></td>
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<tr>
<td>NGO</td>
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<td>Buyer</td>
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Use the ecosystem cards as input for the ecosystem mapping exercise.
PLAN

OUTCOMES
Setup qualitative research with farmers and their ecosystem

RECRUITING CRITERIA

RESEARCH PLAN
Recruiting Criteria

**Plan / Activity**

Based on your initial understanding of the ecosystem — the different stakeholders who influence the farmer — define the criteria for the research participants.

**Time**
1+ day to setup the recruiting criteria

**Materials**
- Ecosystem map
- Text edit tool

**Complexity**
High: good planning skills

**Roles**
Research team (define a research team by picking one or two representatives from each area)

Tip: Select a good split of women and men, do not focus on one gender.
DEFINE THE RESEARCH TARGET

Think of your market space and the actors included in the ecosystem map. **Identify the categories of users and stakeholders that you need to include in the research sessions.** Remember that all the intermediate roles are as important as the final users; try to cover the entire spectrum.

DETAIL THE KEY PARAMETERS FOR SELECTION

Focus on one group of users each time and describe the key factors to select research participants. Concentrate on the elements that are relevant with respect to your research goal. Parameters can include geographical position, age, family size, level of income, etc.

TURN THE RECRUITING CRITERIA INTO A QUESTIONNAIRE

Transform the parameters into questions that could be asked to any potential candidate for the research. This lets you understand if he or she is a good fit. The document that contains this survey is called the recruiting screener.

FINALIZE A PLAN

Select enough participants to meet your interview target in terms of number (how many) and type (groups). The number of participants needs to be estimated in correlation with the project timeline and the days available to prepare, run, and synthesize the field research (usually two in-depth interviews with farmers in a day).
The starting point was identifying the criteria that were relevant for our research purpose and selecting farmers based on their ethnographic and demographic profiles. The assumption was that we could reach a diversified set of people just through our internal and personal contacts. We asked for the support of our “Customer Experience Lab” vendor, who had footprints across all urban and rural cities in Pakistan, and we tried to leverage individual connections. Our initial assumption was that we could recruit a good variety through our direct or indirect connections. We soon realized that it was impossible.

We should have had a much higher level of on-ground penetration to be able to get the diverse ethnographic and demographic profiles that we had in mind.

We ended up moving to the field location, interviewing the recruited participants as planned, and then asking them to point us to other individuals based on the mission profiles in our list.
Another important learning for us was that we shouldn’t limit the scope of the research and only interview farmers.

We didn’t originally include middlemen in the recruiting criteria, because we assumed that they wouldn’t be fully trusted by farmers for accurate information.

During the field research, we visited a fruit market and passed by the rate-setting process between the farmer and middleman. This was really eye opening for us, because we saw that the middleman was providing a lot of really useful information to the farmers.

We started talking to a few more middlemen. We quickly learned that most of them want farmers to succeed, because if farmers do well then it helps their own business, too.

For our next user research, we made the recruiting criteria much broader. We included many types of people, so we would get the full picture.

We adopted the snowball recruiting technique, leveraging our presence to reach more participants.

Our hypothesis changed radically after the intercept interviews at the market. [Kashif, Telenor UX expert]
OUTLINE A PLAN THAT ENABLES YOU TO STRUCTURE THE FIELD ACTIVITIES BY DEFINING RESEARCH TIMELINE, PARTICIPANTS, AND METHODOLOGIES.

**PLAN**

- **TIME**
  90 minutes workshop session

- **MATERIALS**
  - Worksheet
  - Text edit tool

- **COMPLEXITY**
  High: good planning skills

- **ROLES**
  Research team (define a research team by picking one or two representative from each area)
### RESEARCH PLAN

#### INSTRUCTIONS

<table>
<thead>
<tr>
<th>PLAN / OUTCOME</th>
<th>RESEARCH PLAN</th>
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<tbody>
<tr>
<td><strong>STATE THE RESEARCH OBJECTIVE</strong></td>
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<td><strong>Define and prioritize specific research objectives.</strong> These should be high-level question areas (e.g., “Evaluate how farmers trust the information they receive”). Usually three to four objectives with no more than one to two subquestions each are a good scope for a focused research session.</td>
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| **IDENTIFY YOUR TARGET PARTICIPANTS** | | 
| **Discuss the type of participants you will seek to interview.** Identify farmers as well as key ecosystem players who you want to interview (e.g., input shops, middlemen, NGOs). Also consider the locations of interviews, to have a spread of different crops and income. | 

| **DEFINE INTERVIEW METHODS AND TOOLS** | | 
| **Discuss the interview methods and pacing.** Consider different interview methodologies, such as 2-hour in-depth interviews, short intercepts, market visits, expert interviews, and contextual immersion. | 

| **DEFINE THE SCHEDULE OF THE INTERVIEWS** | | 
| **Organize the schedule for field research.** When setting up the schedule, consider finding times during farm market days and avoid key harvest times when farmers are most busy. Make sure to include days for rest and synthesis in the schedule. | 

---

**E.G., IN-DEPTH INTERVIEW + TRUST CIRCLE + PAPER PROTOTYPES**

**QUESTIONS**

**DISCUSS WHO SHOULD GO INTO THE FIELD: TRY TO HAVE A MIX OF GENDER, AGE, AND LANGUAGE SKILLS**
## Research Plan Outline

Plan how to conduct field research

### 01 Research Objective
What is the specific area you need to investigate?

### 02 Research Participants
What are the target participants? (Define role, location, quantity)

### 03 Research Methodologies
Select and describe the methodologies you would like to use

### 04 Time Plan

<table>
<thead>
<tr>
<th>DAY 01</th>
<th>DAY 02</th>
<th>DAY 03</th>
<th>DAY 04</th>
<th>DAY 05</th>
<th>DAY 07</th>
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RESEARCH PLAN

OUTLINE

01 Plan how to conduct field research

- What is the specific area you need to investigate?

02 RESEARCH OBJECTIVE

- Select and describe the methodologies you would like to use

03 RESEARCH PARTICIPANTS

- What are the target participants? (Define role, location, quantity)

04 RESEARCH METHODOLOGIES

05 TIME PLAN

- 8 a.m.
- 12 p.m.
- 8 p.m.

- DAY 01
- DAY 02
- DAY 03
- DAY 04
- DAY 05
- DAY 07
- DAY 08
LEARN

TO CREATE SOMETHING MEANINGFUL, YOU NEED TO BE CLOSER TO THE USER AND TO THE MARKET AND CONTEXTS 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.

PREPARATION
Make sure you are ready to start the field research

DISCUSSION GUIDE
NOTE-TAKING TEMPLATE

ACTIVITIES
Methods and tools that can help you run the research

IN-DEPTH INTERVIEW
FARMING LIFE CYCLE
TRUST CIRCLE
HOUSE-FARM TOUR
INTERCEPT INTERVIEW

OUTCOMES
Methods and tools to frame what you learned

RESEARCH INSIGHTS
REFINED HYPOTHESES
LEARN

PREPARATION

Make sure you are ready to start the field research

DISCUSSION GUIDE

NOTE-TAKING TEMPLATE
OUTLINE TOPICS, QUESTIONS, AND ACTIVITIES YOU PLAN TO FOCUS ON DURING THE FIELD RESEARCH, BUILDING A COMPLETE GUIDE FOR THE MODERATOR.

**TIME**
90+ minutes for each guide

**MATERIALS**
Text edit tool

**COMPLEXITY**
Medium: good understanding of ethnographic research methods

**ROLES**
Research team (define a research team by picking one or two representatives from each area)
LIST THE KEY INVESTIGATION AREAS
Start by listing the main areas you need to explore with each group of participants. Usually the interview is shaped around three to four main areas of exploration. Once you have identified them, assign an order, going from the high-level ones and then gradually digging deeper into the topic.

DETAIL YOUR QUESTIONS FOR EACH INVESTIGATION AREA
Focus on one investigation area each time and list all the questions that come to mind for that specific theme. Make sure the questions encourage participants to share stories and not just answer “yes” or “no.”

ADD HYPOTHESES AND ASSUMPTIONS
Consider the main hypotheses and assumptions that your team have made and find ways to add them into the questionnaire. Don’t be concerned about asking opinions about hypotheses or ideas that may be wrong; this can help to get the conversation going.

DESIGN HANDS-ON ACTIVITIES
Sometimes it’s hard to cover all the points you identified in the discussion guide with direct questions. Review your list of questions at the end and mark the ones that would need the support of physical materials (e.g., cards) to generate more effective discussions.
Following the instructions provided during the first workshop with frog, we started off with the creation of the discussion guide used during the interviews in the field. We started by organizing sticky notes under the categories of “challenges” and “opportunities.” In parallel, we continued planning the overall research in terms of locations and types of participants (middlemen, farmers, experts, etc.).

With challenges, opportunities, and roles roughly defined, we brainstormed and populated trigger questions under each section of the discussion guide.

Our main intention was to ensure “triggering discussions” instead of a simple questionnaire approach.

Once the discussion guide was completed, we circulated it internally across the different teams involved for review.

While it was great to get stories from the farmers, we also had to make sure the discussion was being kept on track. At some points, we were picking keywords from the regional language and paraphrasing, to move the discussion back to the right direction.
Another interesting aspect that we learned is that printing out the discussion guide could sometimes be ineffective, as interviews were then perceived by the participant more as an exam than as an open conversation. We quickly realized that and memorized the questions included in the guide instead of bringing it in front of the interviewees.

We never managed to have a discussion with one person at a time. Usually it was at least five.

One day was very windy. As soon as we started talking, the sheets of the guide were flying around, and we had to use rocks to keep everything on the table. [Kashif, Telenor UX expert]

DISCUSSION GUIDE: PAKISTAN TELENOR INVESTIGATION AREAS

1. INTRODUCTION AND HOUSEKEEPING [10 min]
2. WARM-UP [10 min]
3. FARMING LIFE CYCLE [30 min]
4. PURCHASE, EARNING, AND FINANCIAL SERVICES [30 min]
5. ADVICE, TRUST, AND DECISION-MAKING [20 min]
6. HYPOTHESIS TESTING [20 min]
7. TECHNOLOGY AND CONNECTIVITY [20 min]
8. WRAP-UP [10 min]
INTRODUCTION & HOUSEKEEPING [10 MIN]

Hi, my name is ____________. We are here to learn more about you and find a way to design a better product to support your farming — and we have support from the government and MNO. This is because the farming industry is extremely important to Bangladesh, so with all the new development, it’s important to hear your voice too. We really appreciate all your honest feedback and insights; there is no right or wrong. We just want to hear your life stories. May we come in?

Find a place for everyone to sit or stand comfortably at this point. Hand out your business card.

INTRODUCE OTHERS IN THE GROUP

As you can see I have several colleagues with me today. They are here to take detailed notes so that I can focus on our conversation. I’ll be conducting the interview, ______ will be taking notes, and ______ will be taking photos.

[If simultaneous translator present: We also have a translator with us today, she/he will translate our conversation into English for my colleagues and me.]

RECORDING

We would like to record our discussion today, both video and audio, and will capture certain moments with a still camera. This is merely to ensure that we capture your thoughts and opinion accurately, and I can assure you that neither your name nor picture will ever be used publicly. Is it alright if we turn the camera on? At the end of our session we can review the photos together to make sure you approve of the photos we’ve collected.

TIME

We’ll spend the next ______ hours learning about your experiences with farming and your relationship with technology, your personal preferences, and general needs. Are you free for the next 2 or so hours? In this time we will do an interview between you and I, then we’d like to ask you to show us your phone, and take us on an informal tour of your farm.

Do you have any questions for me before we start?
DISCUSSION GUIDE TEMPLATE
Add questions you want to ask under each topic

02 WARM-UP [10 MIN]

GOAL: GET A GENERAL UNDERSTANDING OF THE PARTICIPANTS’ LIFE AND WORK.

What’s your name?
Tell us about your family.
How is your typical day?
What do you do in your spare time?
What are your goals in the next few years?

03 FARMING LIFE CYCLE [30 MIN]

GOAL: GET A GENERAL UNDERSTANDING ABOUT THE CROPS GROWN ACROSS THE YEAR AND DOCUMENT THE KEY TOUCH POINTS IN THE FARMING CYCLE.

See Farming Life Cycle exercise and worksheet

04 PURCHASE, EARNINGS, AND FINANCIAL SERVICES [30 MIN]

GOAL: UNDERSTAND PARTICIPANTS’ FINANCIAL BEHAVIOR

What are your primary sources of income?
How do you pay your electricity, phone bills, and school bills etc.?
What are your primary expenses on the farm?
Do you have a bank account?
Have you taken out a loan in the past year?
05 ADVICE, TRUST, AND DECISION-MAKING [20 MIN]

GOAL: GET A GENERAL UNDERSTANDING ABOUT PARTICIPANTS’ DECISION-MAKING BEHAVIOR AND WHO INFLUENCES THEIR DECISIONS.

See Trust Circle exercise and worksheet.

06 HYPOTHESIS TESTING [20 MIN]

IF THE GOVERNMENT OR A PRIVATE COMPANY WOULD PROVIDE THESE SERVICES TO YOU FOR A SMALL FEE, WHICH WOULD YOU BE INTERESTED IN? (PLEASE RANK IN ORDER OF IMPORTANCE.)

The mobile device is an unfamiliar channel for accessing agricultural information.
Mobile phones subsidized with the farmer-centric services will have greater penetration in the market.
Information sources must be trusted in order for the information to be used by the farmer.
Farmers don’t follow best agricultural practices because they lack expert knowledge and advice.

07 TECHNOLOGY & CONNECTIVITY [20 MIN]

GOAL: GET A GENERAL UNDERSTANDING ABOUT THE PARTICIPANTS’ BEHAVIOR TOWARD TECHNOLOGY AND CONNECTIVITY, AS WELL AS THEIR DIGITAL LITERACY LEVELS AND POTENTIAL INTERESTS IN NEW TOOLS.

Do you have a mobile phone? Could you show us?
What do you use the mobile most for?
What are your favorite things to do on your mobile?
Besides calling, do you use the phone for any other services?
How can a mobile help you or improve your life?
08

WRAP-UP [10 MIN]

CLOSING QUESTIONS AROUND THEIR GOALS/DREAMS, THEIR HEALTH, AND THEIR FAMILY

Thank you for your time today
Review photos
Goodbyes
Gifts

Question: Follow-up information/views? Feedback?


SET A PREDEFINED TEMPLATE FOR NOTE-TAKING TO KEEP DATA COLLECTION ORGANIZED AND MAKE IT EASIER TO SYNTHESISE THE DATA LATER.

**TIME**
1+ hours practice, then used throughout field research

**MATERIALS**
Block notes

**COMPLEXITY**
Medium: fast analytical skills

**ROLES**
Note-taker (define who in the research team is going to take notes)
**ASSIGN ROLES**
Assign each team member a role to play during field research. The moderator will be in charge of asking the questions, and the others will be observers charged with taking notes and photos. Observers wait to ask questions until invited by the moderator.

**DEFINE A NOTE-TAKING FORMAT**
Establish a shared note-taking format for the observers. It can be analog or digital (usually analog works better in rural environments). Predefined categories or maps could help setting a grid for the note-taker. Experimenting beforehand is highly recommended.

**REFLECT ON THE NOTE-TAKING TASK**
Explain that careful in-field note-taking enables later synthesis of insights and reduces the tendency for team members to only remember information that confirms their own opinions. The notes from the field will become the rough data to build learnings upon.

**APPLY IT!**
During the interviews, write down each note following the predefined categories. Remember that a note can be a quote, but it can also be your observation of body language, behavior or of something else in the environment.

**RECOMMENDATION:** Creating predefined categories before entering the field will give more structure to your notes.
LEARN

ACTIVITIES

Methods and tools that can help you run the research

- IN-DEPTH INTERVIEW
- FARMING LIFE CYCLE
- TRUST CIRCLE
- HOUSE-FARM TOUR
- INTERCEPT INTERVIEWS
TIP: BE AWARE OF GENDER DYNAMICS. IF YOU WANT TO INTERVIEW WOMEN, CONSIDER AN ALL-FEMALE INTERVIEW TEAM OR HAVE A FEMALE MODERATOR. IF YOU ARE TALKING TO THE MALE HEAD OF THE HOUSEHOLD, HAVE A MALE MODERATOR.

Developing a deep understanding of farmers is critical when designing an mAgri product that meets the real needs of the target users.

**HAVE FOCUSED ONE-TO-ONE CONVERSATIONS WITH SELECTED PARTICIPANTS TO DIG DEEP INTO THEIR HABITS, NEEDS, MOTIVATIONS, AND BEHAVIORS.**

**TIME**
90-120 minutes per interview

**MATERIALS**
- Discussion guides
- Block notes
- Camera
- Audio recorder

**COMPLEXITY**
High: expert moderation skills

**ROLES**
- Interviewer
- Note-taker
- Photographer
INTRODUCE YOURSELF AND THE TEAM
Introduce yourself and your organization and explain your research objectives to set clear expectations. Always check in to understand if the participant is comfortable with the interview and try to build a context for the conversation.

ALWAYS ASK WHAT LANGUAGE THE PARTICIPANT IS MORE COMFORTABLE WITH AND BRING WITH YOU SOMEONE WHO CAN SPEAK THE LOCAL DIALECT AND TRANSLATE

APPROACH THE INTERVIEW WITH STRUCTURE
Establishing credibility is essential to set the right tone for the conversation. During the interview it’s important to cover all the aspects mentioned in the guide while remaining open and listening carefully, to shape the dialog around what the participant shares and says.

ASK WHY
Always ask why as a way to dig deeper into the answers and uncover hidden needs and motivations. Even when the participant might say something you expect, ask why to understand the key motivation behind his or her actions and answers.

FINISH POLITELY!
At the end of the interview, thank the participant and offer a small gift (appropriate in the local context) to show appreciation for his or her time. If you took photos, let the participant review the photos to make sure he or she is comfortable with them.

TIP: MAKE SURE THAT NO MORE THAN FOUR PEOPLE ATTEND AN INTERVIEW SESSION TO AVOID INTIMIDATING THE PARTICIPANT

NOTE-TAKER
DISCUSSION GUIDE
PHOTOGRAPHER

LEARN / ACTIVITY
IN-DEPTH INTERVIEW INSTRUCTIONS
BUILD AN UNDERSTANDING OF THE WHOLE FARMING LIFE CYCLE TO IDENTIFY PAIN POINTS AND OPPORTUNITIES THAT CAN BE USED IN THE PRODUCT DESIGN.

**TIME**
30 minutes for each farmer interviewed

**MATERIALS**
- Worksheet
- Pen

**COMPLEXITY**
Medium: good facilitation skills

**ROLES**
Interviewer
**FARMING LIFE CYCLE INSTRUCTIONS**

**FARMING STEPS**

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**EMOTIONS**


**KEY CHALLENGES**


**FINANCIAL PLAN**


---

**EXPLAIN THE EXERCISE TO THE PARTICIPANT**

The objective is to discuss the overall farming experience, focusing on each step in the journey. The worksheet provides an initial sequence of phases (plan, prepare, grow, harvest, sell). Feel free to add and remove phases while talking.

**RECOMMENDATION: IF THE FARMER DOESN’T FEEL COMFORTABLE WRITING ON THE SHEET, THE MODERATOR SHOULD PROACTIVELY WRITE ON IT, BASED ON WHAT THE FARMER SAYS**

**DISCUSS THE KEY CHALLENGES**

Start from the first phase and ask the farmer to describe what happens (e.g., “How do you plan the seeding?”) and list the key challenges in that moment (e.g., “What is the most difficult part of planning?”). Write notes directly on the worksheet, phase by phase.

**ASSIGN EMOTIONAL RATING**

Once the map is completed, ask the participant to assign an emotional rate to each moment (e.g., “Do you feel satisfied or frustrated in the plan phase? Why?”). Feel free to draw the emotions using symbols that you think farmers would understand (e.g., different face expressions, star rating, ticks, and crosses).

**[OPTIONAL] ADD THE FINANCIAL LAYER**

Complete the farming life cycle by asking what is the financial income and expenses of each stage. Adding the financial layer to the overall map of challenges and emotions will provide a better understanding of how to design the mAgri service to suit the farmer’s financial cycle.
### Farming Life Cycle Map

Describe the experience phases to identify pain points and opportunities

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<th>Phases</th>
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UNDERSTAND WHO FARMERS TRUST FOR INFORMATION; THESE INSIGHTS ARE A FOUNDATION FOR THE MAGRI PRODUCT AND MARKETING AND DISTRIBUTION PLANS LATER.

**TIME**
20 minutes exercise

**MATERIALS**
- Worksheet
- Player cards

**COMPLEXITY**
Low: basic moderation skills

**ROLES**
Interviewer
BUILD YOUR TRUST CIRCLE
Prepare a set of little cards that represent all the players you identified in the ecosystem (one player per card). Do not exceed more than eight players or the exercise can become overwhelming.

SHOW THE WORKSHEET AND CARDS TO THE PARTICIPANT
During the in-depth interview, place the cards in front of the participant so that he or she can see every item. Introduce the cards one by one and explain the circles visualized in the worksheets to represent the different degrees of trust for information around the farmer.

MAP THE PLAYERS ON THE CIRCLES
Pick the first player you want to discuss and ask the participant how much he or she trusts that player. You can place the card on the circles yourself based on the answer, or ask the participants to do that by themselves. Place the players who they trust the most at the bottom and center of the sheet, and players they trust less to the outer circles.

ASK WHY
The exercise is just a trigger to dig deeper into certain aspects. Before jumping to the next players, always ask why the current one has been placed in a certain position. At the end review the entire map, trying to make some broader considerations about the ecosystem and user’s trust.

RECOMMENDATION: IF YOU ARE AT THE BEGINNING OF A LONG FIELD RESEARCH TRIP, YOU MAY CONSIDER LAMINATING THE CARDS TO BETTER PRESERVE THEM
The trust circle exercise was a fundamental exercise that helped inform our mAgri product. We learned many surprising insights about who the farmers trust for information, and it was very different from what we expected. To prepare for the exercise, we identified eleven players who are part of the farmer’s day-to-day life for information and made a card to represent each one. We could bring the cards into the fields. The trust circle exercise was great to do at the beginning of in-depth interviews with farmers, because the farmers enjoyed the hands-on activity and the discussion.

While each farmer had some differences in whom he or she trusted, it was overall quite consistent across all the interviews. There were three key insights from the exercise that surprised us. First, we learned that farmers don’t really trust other farmers, and mainly see each other as competitors. Second, we were surprised that mobile network operators (MNOs) are not trusted for farm information. Third, we learned that farmers gain trust by validating the information with many sources (e.g., middlemen, input dealer shop, TV, and radio), and won’t just trust a single source of information instantly.

We assumed that farmers would just trust the information sent out to them, but we realized that farmers don’t automatically trust information from mobile network operators (MNOs). They see us as experts about phones, but not farms.
Based on these trust dynamics, we designed the mAgri service that incorporates these learnings. We wanted each farmer to feel the mAgri service is customized for him or her only and not the whole community. We want farmers to get information that makes them more competitive.

Also, we have been working closely with popular farmers in the community and the government to build more trust with the mAgri service, as we know that the mobile operator brand isn’t enough to get farmers’ trust. Also, we decided to make the content sound like a conversation between many different types of people, so that farmers feel they are getting a diverse set of voices on the advice.

We have just completed the user testing with some farmers, and received positive feedback about farmers trusting the mAgri service.

We learned many surprising things about who farmers actually trust for farm information.

The go-to-market strategy and content for the mAgri service was heavily influenced by the findings from the trust circle exercise.

[Lilian, frog program manager]
TRUST CIRCLE MAP
Identify who/what the participants interact with the most, and how this influences decision-making
ASK FOR A GUIDED TOUR THROUGHOUT THE CONTEXT OF WHERE A FARMER LIVES AND WORKS TO OBSERVE **HABITS, NEEDS, AND CHALLENGES.**

**TIME**
30–60 minutes for each farmer interviewed

**MATERIALS**
- Discussion guide
- Block notes
- Camera

**COMPLEXITY**
Low: good observation skills

**ROLES**
- Interviewer
- Note-taker
- Photographer
**INTRODUCE YOURSELF AND THE TEAM**
Introduce yourself and your organization and explain your research objectives to set clear expectations. Always check in to understand if the participant is comfortable with the interview and try to build a context for the conversation.

**ASK FOR A TOUR**
Only start the house-farm tour after you have gained trust with the farmer. If you think the farmer feels comfortable with you, ask the farmer to take you through his or her day visiting the specific places where farm activities take place. Carefully listen to every detail while observing the context.

**DEEPLY INVESTIGATE UNCLEAR ITEMS**
Take time after the visit to ask more questions that help you clarify what you observed during the tour. Focus on elements that have a correlation with your research purpose and be sure to pursue every avenue.

**AFTER THE VISIT**
Don’t forget to thank the farmer for participating! If the tour was particularly insightful, you may consider returning to engage the same interviewee for concept testing during the next phase of the project. Debrief with the rest of the team.
Intercept Interview

TRY TO UNDERSTAND THE WHOLE ECOSYSTEM BY QUICKLY GETTING THE PERSPECTIVE FROM SEVERAL PLAYERS. GO BEYOND JUST THE FARMER TO DISCLOSE OTHER PAIN POINTS AND OPPORTUNITIES.

TIME
15–30 minutes each intercept interview

MATERIALS
• Block notes
• Camera

COMPLEXITY
Low: good conversation skills

ROLES
• Interviewer
• Photographer
PLAN FOR SOME INTERCEPTS
Identify key players from the ecosystem mapping exercise that you need to understand further. Find ways to intercept these key players who may provide interesting perspectives. For example, go to farmer market days, visit input stores, and attend NGO events. Have a short discussion guide with three to five questions that you would like to ask them.

INTRODUCE YOURSELF BRIEFLY
Once you find somebody you would like to briefly interview, introduce yourself and explain what you are doing with the project. Ask if he or she is willing to answer a couple of questions that would help you better understand some aspects. Be transparent about your goals.

ASK A FEW QUESTIONS
The most important thing to remember with intercept interviews is that the people you talk to may not have a lot of time to respond to questions. Try to find a quiet spot to talk and keep the conversation to less than 30 minutes. You can also run a group interview in the same way.

[OPTIONAL] FOLLOW UP LATER
If the data collected is interesting and you want to explore it further, ask the intercept to meet at another time to continue the conversation or schedule another time for an in-depth interview. Intercepts are usually a great opportunity for snowball recruiting (where you ask participants to connect you with other interesting people for interviews).
BANGLADESH

Open Minded
- everything improving for growing

Family Dynamics
- His family is very involved in the farm. Son → COW. Wife → FEEDS MILKERS
- He was late coming into farm but realized he needed to be the provider for his family.
- He trusts his maternal uncle's advice above an expert

He uses a mobile phone to get price info.
- He sometimes buys in Dhaka to sell in Narasingdi.
- The price association sets his potato prices.
- She usually sells eggs, milk, and what she has left over.
- Family members are more trusted than anyone else.
- Joint family living together.
- Joint family living together.

Joint family living together.
- Her brothers and sisters are more educated than her.

3 children - daughter kept in her, older son works in a computer. Younger son works in a factory. 2 months of the year it is raining. The other 9 months it is sunny.

She is the main breadwinner of the family.
LEARN

Methods and tools to frame what you learned

OUTCOMES

RESEARCH INSIGHTS

REFINED HYPOTHESES
MEET WITH YOUR TEAM AFTER EACH INTERVIEW AND AT THE END OF THE DAY TO CAPTURE RESEARCH INSIGHTS WHILE THEY ARE FRESH.

**TIME**
30 minutes at the end of each interview; 1 hour at the end of the day

**MATERIALS**
- Post-it notes
- Block notes

**COMPLEXITY**
Medium: good collaboration and analytical skills

**PARTICIPANTS**
Research team (define a research team by picking one or two representative from each area)
STOP SOMEWHERE
Find a place for the full team to comfortably meet right after each interview. Do not let much time elapse between the interview and the debrief to ensure you remember the details of every interview. If you are traveling with a car, the trip usually becomes a good moment for debriefing.

ELABORATE INSIGHTS INDIVIDUALLY
The lead should have five key questions that everyone should individually answer about that interview within 10 minutes. These questions could span from asking about the interview profile, to surprising insights, to how to improve the next interview process.

DISCUSS ALL THE INSIGHTS COLLECTIVELY
Team members should take turns reading aloud their answers for each of the questions. Team members should add onto another person’s insights, rather than repeat them. Each story or insight should have one Post-it note.

LEAVE TIME TO DEBRIEF ABOUT THE ENTIRE DAY
During the evening the team can cluster similar insights and stories together and discuss the implications of learnings to the mAgri service. Be clear about what new questions or hypotheses need to be tested for the next round of interviews. Refine your insights throughout the entire duration of the research.

IF YOU HAVE MULTIPLE TEAMS RUNNING RESEARCH IN PARALLEL, FIND A WAY TO DEBRIEF TOGETHER (e.g., VIDEO CALL)

IF YOU IDENTIFY KEY INSIGHTS RELATED TO GENDER DYNAMICS, TRY TO VALIDATE YOUR THINKING WITH LOCAL EXPERTS
Refined Hypotheses

PUT THE INSIGHTS INTO ACTION BY USING THEM TO VERIFY AND REFINE THE ORIGINAL HYPOTHESES AND EARLY PRODUCT CONCEPTS.

TIME
30 minutes
exercise

MATERIALS
• First hypothesis
• Notes and insights

COMPLEXITY
Medium: good analytical skills

PARTICIPANTS
• Project manager
• UX lead
• Technology
• Marketing
• Content
REVIEW THE FIRST HYPOTHESIS
Do this exercise with a mix of people, some who have done the field research, some who have not. Start from the initial hypothesis that was created in the planning phase. Write each hypothesis on a separate sheet of paper.

MAP YOUR RESEARCH INSIGHTS AGAINST EACH HYPOTHESIS
Have the field team add Post-it notes under each statement, representing a key related insight collected in the field. Try to write insights that represent patterns you observed several times; don’t challenge an hypothesis with single intuitions.

REFINE THE STATEMENTS
Compare the initial statement with the insights from the field, and decide whether you can confirm the hypothesis or need to change it. If needed, come out with a new statement that represents the revised hypothesis. Repeat the same exercise for all the statements.

CONTINUE TO ITERATE
The hypothesis refinement is an ongoing activity that continues to evolve as the research and the project evolve. Hypotheses, as well as archetypes and ecosystems, can vary over time, reflecting changes in the market, technology, and society.
Our team developed an initial mAgri concept before going into the field. The aim of the product was to develop a stronger link between farmers and buyers by providing better access to information (e.g., prices, amount of crops to sell).

Before our first interview, the team took some time to write down the assumptions about farmers that led to the concept. After spending about three weeks in the field, we revisited each hypothesis and found that many of them were not correct.

For example, we thought that farmers lacked access to pricing information. During the field research, we learned that farmers have multiple ways to learn about pricing, such as radio, TV, and other farmers who just went to the market. However, just knowing the price doesn’t empower them, because they are located far away and their quantity of crops isn’t large enough to negotiate for a better price. So, what farmers actually lack is negotiation power. Having more information about the latest prices doesn’t necessarily mean a farmer is more empowered to get a better price.
The hypothesis exercise was important for the team to realize that basic assumptions we make about the farmers aren’t always correct, and it’s important to speak with the farmers themselves to make sure we aren’t imposing our own values and beliefs into the design.

Farmers don’t have access to latest market prices and buyers, resulting in diminished bargaining power and income.

Farmers do have timely access to market prices and buyers, but access to information alone does not necessarily improve negotiation power.

Farmers don’t follow best agricultural practices and misuse chemicals because they lack expert knowledge and advice.

When expert advice seems risky and not validated, farmers deliberately ignore the advice and follow their own instinct and experience.

The mobile device is an unfamiliar channel for accessing agricultural information.

The mobile device is an unfamiliar channel for accessing information, and it won’t replace the other channels in the short term as a key, trusted source of farming information.
ARE YOU CREATING AN mAgri SERVICE THAT IS DEEPLY ROOTED IN INSIGHTS FROM THE FIELD? CREATE IS ABOUT IDENTIFYING THE RIGHT OPPORTUNITIES AND FIGURING OUT HOW THEY AFFECT YOUR mAgri SERVICE. IT’S CRITICAL THAT THE CREATE PROCESS TAKES INTO ACCOUNT THE DIVERSE VOICES OF THE FARMERS AND THEIR ECOSYSTEM.

PREPARATION
Make sure you have the right assets to start generating ideas
USER ARCHETYPES
LIFE CYCLE MAPPING

ACTIVITIES
Methods and tools that can help you generate concepts
IDEATION EXERCISES
CUSTOMER JOURNEY

OUTCOMES
Methods and tools to consolidate your concepts
VALUE PROPOSITION
SERVICE BLUEPRINT
MINIMUM VIABLE PRODUCT
ADVOCATE & SKEPTICS MAP
BUSINESS MODEL
Make sure you have the right assets to start generating ideas

**PREPARATION**

**USER ARCHETYPES**

**LIFE CYCLE MAPPING**
DON’T ASSUME THAT ALL FARMERS ARE THE SAME WHEN YOU DESIGN A PRODUCT. SEGMENTING FARMERS INTO ARCHETYPES IS CRITICAL WHEN DECIDING WHO YOU ARE DESIGNING FOR, AND WHO WILL BE THE EARLY ADOPTERS.

TIME
2–3 hours working session

MATERIALS
- Worksheets
- Photos
- Post-it notes

COMPLEXITY
High: advanced analytical skills

PARTICIPANTS
- Project manager
- UX lead
- Technology
- Marketing
- Content
CLUSTER YOUR INTERVIEWEES
Within each group, look for patterns across farmers who have similar attitudes, aspirations, community engagement, access to information, financial access, and technical literacy. If there are other factors about the farmers that could affect the design, feel free to include them.

GIVE A NAME TO EACH SEGMENT
For each group that has similar traits, give each a representative name. Find one farmer who represents the group well and let him or her be the “face” of the group (e.g., the influencer, the traditionalist).

REPEAT THE EXERCISE FOR OTHER TYPES OF PARTICIPANTS
Beyond the farmer, if there are also other key players that you need to consider deeply for the mAgri service (e.g., middlemen), please repeat the exercise for them. Your archetypes should be representative of the complexity and dynamics of the ecosystem.

DISCUSS IMPLICATIONS FOR DESIGN
As a team, discuss how the different archetypes affect the design of the mAgri service. Are there some archetypes you need to engage more than others? What are archetypes you should be careful about?
USER ARCHETYPE WORKSHEET
Identify the key user archetypes in the ecosystem

01 WHO?

Add a sketch
Add a title

Add a quote

02 KEY ACTIVITIES

KEY NEEDS

03 DAY IN THE LIFE

Morning
Night
WHO?

DAY IN THE LIFE

Add a sketch Add a title

01

KEY ACTIVITIES
KEY NEEDS

02

USER ARCHETYPE

WORKSHEET

Identify the key user archetypes in the ecosystem

Morning

Morning

Night

Night
ANALYZE THE EXISTING FARMING LIFE CYCLE TO IDENTIFY PAIN POINTS AND OPPORTUNITIES THAT COULD BE ADDRESSED BY THE mAgri SERVICE.

TIME
60 minutes for each map (prepare one per archetype)

MATERIALS
• Post-its (3 colors)
• Pens

COMPLEXITY
Low: basic analytical skills

PARTICIPANTS
• Project manager
• UX lead
• Technology
• Marketing
• Content
LIST THE PHASES AND TOUCH POINTS
Think of the experience of the farmers you interviewed and identify the key phases. The steps of the farming life cycle exercise are a good starting point (plan, prepare, grow, harvest, sell). Draw the phases on the horizontal axis and list all the touch points on the vertical line.

ANALYZE THE FARMING LIFE CYCLE
Map the information collected in the field by phase, considering each touch point. Start with the first phase and proceed along the horizontal line. Always ask yourself things like, “What happens during the planning?” or “How is the mobile involved in the planning now?”

HIGHLIGHT THE PAIN POINTS AND OPPORTUNITIES
Once you have described the entire farming life cycle, start reviewing it and highlighting the pain points you have identified. You can use a different Post-it color to make them visible. When you are done with pain points, highlight the opportunities, using a third color.

DIGITIZE THE OUTCOME
The map you elaborated represents a key asset for the generation of ideas and the creation of a service proposition. Digitize the map, trying to keep track of all the information collected (you can use Excel to copy the text, or PowerPoint and Illustrator to draw it as a visual representation).
CREATE

ACTIVITIES
Methods and tools that can help you generate concepts

IDEATION EXERCISES

CUSTOMER JOURNEY
ALTERNATE QUICK EXERCISES TO CAPTURE IDEAS AND INJECT NEW ENERGY AS YOU GO THROUGH THE PROCESS OF CONCEPT CREATION.

TIME
45 minutes each exercise

MATERIALS
• Worksheets
• Post-its
• Pens

COMPLEXITY
Medium: good lateral thinking capabilities

PARTICIPANTS
• Team members
• Stakeholders
• Experts / users
**RANDOM ENTRY**

Trigger lateral thinking and innovative concepts by leveraging associations with seemingly unrelated objects. Take a random object. List the associations with the object that come to mind. Use the associations to frame “what if?” statements around problem areas.

**EXAMPLE:** RANDOM OBJECT: CAR > ASSOCIATION: DRIVER LICENSE > PROVOCATION: “WHAT IF THERE WERE A FARMER LICENSE FOR mAgri SERVICES?”

**MAP RESULTS**

Try to find answers to the “what if?” statements, shaping them as applicable solutions and ideas. Write each idea on a separate card. At the end of the exercise, look for similarities between the different ideas generated.

**PROVOCATION EXERCISE**

Use unusual statements to shatter constraints and push the boundaries in imagining new offerings. List assumptions you take for granted about the opportunity area. Intentionally provoke each assumption using “what if?” statements (escape, reversal, or exaggeration).

**EXAMPLE:** ASSUMPTION: FARMERS PREFER CASH TO MOBILE MONEY > PROVOCATION: “WHAT IF FARMERS STARTED TO USE MOBILE MONEY ONLY, FOREGOING CASH COMPLETELY?”

**MAP RESULTS**

Try to find answers to the “what if?” statements, shaping them as applicable solutions and ideas. Write each idea on a separate card. At the end of the exercise, look for similarities between the different ideas generated.
<table>
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<th>FRESH IDEAS</th>
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01 **RANDOM OBJECT**  
Apply lateral thinking to generate fresh ideas

02 **FREE ASSOCIATIONS**  
List the associations with the object that came to mind

03 **‘WHAT IF’ STATEMENTS**  
Turn the associations into “what if...” related to your problem area

04 **RANDOM OBJECT WORKSHEET**  
Turn the associations into “what if...” related to your problem area
PROVOCATIONS WORKSHEET
Apply lateral thinking to generate fresh ideas

01 PROBLEM AREA

02 YOUR ASSUMPTIONS
List all the aspects that you take for granted

03 PROVOCATIONS
Provoke each assumption using a "What if..." statement

04 FRESH IDEAS
DEVELOP IDEAS FOR A DIFFERENTIATED CUSTOMER JOURNEY THAT COULD GAIN FARMERS’ TRUST AND CONVERT THEM INTO LOYAL USERS.

**TIME**
60+ minutes (depending on the complexity of the journey)

**MATERIALS**
- Paper
- Pens

**COMPLEXITY**
Medium: good drawing and envisioning skills

**PARTICIPANTS**
UX experts
DETAIL EACH PHASE OF THE JOURNEY
Typically there are the five key moments in the customer journey that are essential to build understanding and trust with farmers:

a. awareness: getting to know the mAgri service
b. registration: signing up for the mAgri service
c. first-time experience: using the mAgri service for the first time themselves
d. regular use: using the mAgri service again the next season
e. support: asking for help when they are stuck

Review the customer journey worksheet and add more phases if needed (e.g., training, payment, recharge,...), thinking of the macro-steps that farmers experience with your mAgri service.

DESCRIPT THE STEPS
Describe how you envision the experience of each specific phase of interaction with the mAgri service. Write down the activities involved, or directly draw out the scenes (like in a comic strip, not focused on the phone screen).

IDENTIFY THE OPEN POINTS
If the team has questions or uncertain parts of the customer journey (e.g., would the farmer know how to use USSD?), those should be written down below each step of the journey. These can be questions for the UX expert to ask in the next user testing.
### 01 KEY STEPS

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<th>Awareness</th>
<th>Registration</th>
<th>First-Time Experience</th>
<th>Regular Use</th>
<th>Support</th>
<th>Unsubscribe</th>
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<td>Get to know the mAgri service</td>
<td>Sign up for the mAgri service</td>
<td>Use the mAgri service on their own</td>
<td>Continue using the mAgri service</td>
<td>Ask for help if stuck during use</td>
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### 02 WHAT HAPPENS?

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### 03 KEY QUESTIONS FOR THE USER

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CREATE

OUTCOMES
Methods and tools to consolidate your concepts

VALUE PROPOSITION

SERVICE BLUEPRINT

MINIMUM V VIABLE PRODUCT

ADVOCATE & SKEPTICS MAP

BUSINESS MODEL
DEVELOP AN ASPIRATIONAL VALUE PROPOSITION, WHICH GIVES POTENTIAL USERS A STRONG SENSE OF WHAT THE PRODUCT WILL DO FOR THEM, TO HELP ATTRACT AND MAINTAIN USERS.

TIME
2 hours working session

MATERIALS
• Worksheet
• Field insights
• Pens

COMPLEXITY
Medium: merge product and business visions

ROLES
• Marketing team
• UX experts
• Product managers
**Fill Out the Value Proposition Template**
Each person in the group should take 20 minutes to fill out the value proposition template individually. Afterward, each person should share his or her value proposition statement, key user insight, and key product features.

**Identify the Most Appealing Value Propositions**
After discussion, the group should align on two to three different value propositions that appeal to farmers. Through the discussion, the group can combine different people’s ideas. If the group converges on a single idea, try experimenting with different ways to describe the value proposition.

**Reflect on Features and Marketing Strategy**
The group should discuss how the features and marketing strategy might change to suit each proposed value proposition. Focus on one of the selected value propositions at a time, and gather notes on Post-its during the discussion.

**Consolidate the Outcomes**
Finally, create a poster for each value proposition. The poster includes a statement representing the value proposition and the summary of the associated features. This becomes a poster to try with participants during your next phase of user testing.
### 01 KEY ASPIRATION

**What is the key aspiration for a farmer to use this mAgri service?**

### 02 VALUE PROPOSITION

**What is the one sentence you would use to sell this service?**

### 03 KEY FEATURES

**What are the key features that support this value proposition?**

### 04 RELEVANCE

**Is this value proposition relevant for all farmers or just some of them?**
Develop an aspirational value proposition for farmers

01 KEY ASPIRATION USER INSIGHT
What is the key aspiration for a farmer to use this mAgri service?
What are the key user insight stories that would support this motivation?

03 KEY FEATURES RELEVANCE
What are the key features that support this value proposition?
Is this value proposition relevant for all farmers or just some of them?

VALUE PROPOSITION
What is the one sentence you would use to sell this service?
MAP THE SERVICE DELIVERY IN ORDER TO PRESENT ALL STAKEHOLDER ACTIVITIES AND INTERACTIONS CONTRIBUTING TO THE PRODUCT, AND TO HIGHLIGHT ANY GAPS IN THE CURRENT DESIGN.

TIME
60 minutes working session

MATERIALS
- Worksheet
- Post-its
- Pens

COMPlexITY
High: advanced analytical and strategic thinking

PArtICIPANTS
UX experts
START FROM A HIGH-LEVEL SERVICE CONCEPT
If you haven’t already defined a service concept, write down all your ideas and apply user and business criteria as a way to rank them (you can refer back to the success criteria exercise, but also add new criteria as well). Finally consolidate the key ideas into a single coherent service concept.

BUILD YOUR AXIS
The service blueprint is a single representation of the entire experience that maps the stages of engagement and all the players participating in the mAgri service. Build your horizontal axis by listing the phases of the farming life cycle and the vertical one by listing all the players involved.

DISPLAY ALL THE ACTIVITIES
Using Post-its and markers, define what happens in the different stages of the farming life cycle during the interaction with the mAgri service; list all the activities that take place. If you are using Post-its, position the activity following the matrix you created (based on the phase and touch point involved).

ADD GAPS OR OPPORTUNITIES
The service blueprint is an analytical tool that helps you detail the process needed to implement your idea. Use it to highlight any possible gap you notice (to start planning for solutions) and opportunities that you can further investigate.
01 KEY STEPS

TRAINING

PLAN

SEED

GROW

HARVEST

MARTKET

02 ACTIVITIES / USER 01
(e.g., ordinary farmer)

03 ACTIVITIES / USER 02
(e.g., lead farmer)

04 ACTIVITIES / USER 03
(e.g., agribusiness)
BRING THE TEAM TOGETHER TO DECIDE ON A FEASIBLE PRODUCT TO LAUNCH QUICKLY AND PLAN FOR THIS LAUNCH. THIS DOCUMENT COULD BE THE BASIS OF FURTHER ITERATIONS POST LAUNCH.

**TIME**
2 hours workshop session

**MATERIALS**
- Post-its
- Large room

**COMPLEXITY**
High: good analytical and strategic thinking

**PARTICIPANTS**
- Project manager
- UX lead
- Technology
- Marketing
- Content
ALIGN ON THE FIRST PRODUCT RELEASE SCOPE

Based on service blueprint, write down the key features across the customer journey, with a focus on features, content, technology, agent training and incentives, and marketing plan. The group should discuss which activities are Must, Should, Could, Won’t across the farming journey for the first release of the product.

- **Must:** a must feature for the product to exist and has high user impact.
- **Should:** a feature that will make the product a lot better even if it isn’t needed.
- **Could:** a “nice to have” feature that could be included in this or next release.
- **Won’t:** a feature that is not needed in the product.

ASSESS THE IMPLICATIONS

Ensure to align as a cross-functional group whether all the features in the “must” category are necessary for the first release. Make an effort to remove features that are not necessary for the first release.

DEFINE THE MVP

The features in “Must” become the MVP. Create a comprehensive project plan to launch the “must” features for the first product release with the whole team. Assess whether the timeline is acceptable. If the product release timeline needs to be shortened, there may be features that could be simplified, removed, or created on a smaller scale instead.

KEEP THE MVP UP-TO-DATE FOR THE NEXT PRODUCT RELEASE

The MVP is just the very first product in the market. Once the product is launched and there is more user feedback, the MVP should be updated for the next product release and the exercise can be repeated.
BE AWARE OF WHICH PLAYERS IN THE ECOSYSTEM ARE SUPPORTIVE OR SKEPTICAL ABOUT YOUR SERVICE. TARGETING THE WRONG SEGMENTS, OR FAILING TO GET THE BUY-IN OF KEY PLAYERS, COULD MAKE OR BREAK YOUR PRODUCT.

Advocate & Skeptics Map

CREATE / ACTIVITY

BE AWARE OF WHICH PLAYERS IN THE ECOSYSTEM ARE SUPPORTIVE OR SKEPTICAL ABOUT YOUR SERVICE. TARGETING THE WRONG SEGMENTS, OR FAILING TO GET THE BUY-IN OF KEY PLAYERS, COULD MAKE OR BREAK YOUR PRODUCT.

TIME
30 minutes working session

MATERIALS
• Paper
• Post-it notes
• Pens

COMPLEXITY
Medium: good analytical skills

ROLES
• Project manager
• UX lead
• Technology
• Marketing
• Content
LIST USER ARCHETYPES AND KEY PLAYERS
Review the MVP and the players identified during the ecosystem mapping activity. Write out each of the key players and the archetypes identified using one Post-it per actor.

DEFINE ADVOCATES AND SKEPTICS
On a board, draw three columns: advocate, skeptic, and indifferent. Discuss as a group which column each player belongs, depending on his or her perspective about the mAgri service.

UNDERSTAND HOW TO TAKE ACTION
Discuss as a group how to make each of the advocates an even stronger advocate. This could involve giving more incentives for the advocate, training agents to identify advocates, or giving advocates a special certification. Discuss as a group how to manage the skeptics and ensure that they will not negatively affect the service too much.

REFINE THE MVP
Based on the findings, go back to the MVP and add in any additional actions to be taken for the MVP.
DEVELOP AN INITIAL BUSINESS MODEL THAT ALLOWS YOU TO BALANCE COSTS AND REVENUES OF THE PRODUCT SUSTAINABLY. THIS CAN BE TESTED AND REFINED THROUGH USER VALIDATION.

TIME
60 minutes for each concept

MATERIALS
• Worksheet
• Pens

COMPLEXITY
Medium: good understanding of production and market impact

PARTICIPANTS
• Marketing team
• Sales team
• Business Development
• UX expert
FOCUS ON ONE CUSTOMER SEGMENT

Fill in the business modeling worksheet based on the MVP developed. Focus on one user segment that will be targeted for the exercise and discuss the customer relationship. Try not to talk in generalities, but leverage the research insights and archetypes.

STATE THE VALUE PROPOSITION, ACTIVITIES, AND CHANNELS

Begin by addressing what problem is being solved for the customer segment and record it in the Value Proposition box. The facilitator can then ask the group to list specific activities and channels needed to satisfy customers’ needs.

LIST RESOURCES AND PARTNERS NEEDED

Team members are encouraged to list resources and partners needed to carry out the features previously listed. For key resources and partners, include them in one of the user validation sessions to incorporate their views in the overall plan.

ASSESS REVENUE AND COST IMPLICATIONS

Discuss the cost and revenue streams. Make some assumptions about the pricing of the product that can be tested with the farmers in the next user validation.
<table>
<thead>
<tr>
<th><strong>BUSINESS MODEL WORKSHEET</strong></th>
<th>Develop an initial business model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>01</strong> VALUE PROPOSITION</td>
<td></td>
</tr>
<tr>
<td>What is the one sentence you would use to sell this service?</td>
<td></td>
</tr>
<tr>
<td><strong>02</strong> KEY ACTIVITIES</td>
<td>KEY CHANNELS</td>
</tr>
<tr>
<td>What are the services that need to be performed?</td>
<td>What are the key channels involved?</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>04</strong> KEY RESOURCES</td>
<td>KEY PARTNERS</td>
</tr>
<tr>
<td>What resources need to be leveraged?</td>
<td>Are there external partners that could be used?</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>05</strong> COST STRUCTURE</td>
<td>REVENUE STREAM</td>
</tr>
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<td></td>
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<td></td>
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</tr>
</tbody>
</table>
BUSINESS MODEL WORKSHEET

Develop an initial business model

01 What are the services that need to be performed? What are the key channels involved?

02 Key Activities

03 Key Channels

04 Key Resources

05 Key Partners

06 Cost Structure

07 Revenue Stream

08 Value Proposition

What is the one sentence you would use to sell this service?
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.

DEVELOP

PREPARATION
Plan how to collect user feedback during the service development

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
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.
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
During early validation sessions, use card-based activities to ensure the MVP is addressing real user needs.

**Card Sorting**

**Develop / Activity**

**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

<table>
<thead>
<tr>
<th>TIME</th>
<th>90+ minutes (depending on the complexity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIALS</td>
<td>• Basic art supplies&lt;br&gt;• Scissors and tape&lt;br&gt;• Existing IVR platforms</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>Medium: good drawing skills</td>
</tr>
<tr>
<td>ROLES</td>
<td>UX expert</td>
</tr>
</tbody>
</table>

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.**
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.
Sketch key user screens to simulate the experience.
Methods and tools that can help you adjust what you are doing

CONTENT CONSIDERATIONS
AGENT TRAINING
GO-TO-MARKET STRATEGY
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.
Agent Training & Planning

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.

**TIME**
3-4 hours working session

**MATERIALS**
Training materials

**COMPLEXITY**
High

**ROLES**
- Sales
- UX expert
- Agent representative
DECEIVE 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.

DEVELOP / ACTIVITY

1. 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.

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. 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.

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

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.
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.

**DEVELOP / OUTCOME**

**TIME**
3-4 hours working session

**MATERIALS**
Current marketing strategy

**COMPLEXITY**
High

**ROLES**
- Marketing team
- UX expert
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]
THE LAUNCH IS ONLY THE BEGINNING OF THE JOURNEY, NOT THE GOAL. WHEN THE PRODUCT LAUNCHES, 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.

**PREPARATION**
Plan a monitoring strategy to gather feedback after launch

**PRODUCT MONITORING**

**ACTIVITIES**
Look at the entire experience and what needs to be refined

**CUSTOMER JOURNEY ISSUES**

**OUTCOMES**
Define stages for product refinement and upgrade

**PRODUCT ITERATIVE PLANNING**
SET UP A MONITORING PLAN TO UNDERSTAND WHETHER THE PRODUCT IS ACHIEVING ITS GOALS, OR HOW IT NEEDS TO BE CHANGED IN ORDER TO DO SO.

**TIME**
60 minutes working session

**MATERIALS**
- Worksheet
- Pens

**COMPLEXITY**
Medium: good analytical and planning skills

**ROLES**
- Project manager
- UX lead
- Technology
- Marketing
- Content
DEFINE MONITORING AREAS
Review all the different areas of the customer journey that are important to analyze in order to improve on the mAgri service going forward. Feel free to use the monitoring areas provided in the next pages as well as add some additional ones specific to your service. Make sure that the monitoring plan covers the whole customer journey.

1

PRIORITIZE MOST IMPORTANT AREAS
Out of all the monitoring areas, select up to 10 as priorities. For each one, define how to measure it (describe the methodology and participant) and how often (frequency of measurement).

2

IMPLEMENT DATA COLLECTION
Based on the complete list of monitoring areas and strategies for measurement, discuss with your analytics and UX teams how to embed these metrics in the launched service.

3

REVIEW PRIORITIES
On a monthly or quarterly basis, review the monitoring areas to identify top ones that need to be addressed. When the time for the planned evaluation is over (e.g., end of quarter), review the set of 10 areas again to see if they need to be refreshed.

4
## Monitoring Plan: Priority Areas

Use the following areas as a starting point for prioritization:

<table>
<thead>
<tr>
<th>We Need to Know Whether...</th>
<th>We Need to Know Whether...</th>
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<th>We Need to Know Whether...</th>
<th>We Need to Know Whether...</th>
</tr>
</thead>
<tbody>
<tr>
<td>The value proposition of the mAgri service resonates with farmers</td>
<td>The marketing efforts are reaching the target audience</td>
<td>The mAgri service impacted or mattered to farmers</td>
<td>Farmers trust the service</td>
<td>The mAgri service conflicts with any cultural norms</td>
</tr>
<tr>
<td>Farmers know how to stop the subscription and feel in control</td>
<td>Farmers are facing any connectivity issues with the service</td>
<td>The Unstructured Supplementary Service Data (USSD) menu is easy to navigate</td>
<td>Farmers remember the mAgri service number</td>
<td>Farmers can easily find help with the service when they need it</td>
</tr>
<tr>
<td>Farmers are using the service properly</td>
<td>The service is using the right channel across the entire customer journey</td>
<td>The pricing model is right</td>
<td>Farmers think that the information arrives at the right time</td>
<td>Farmers think that the information is actionable</td>
</tr>
</tbody>
</table>
## Monitoring Plan: Priority Areas

Use the following areas as a starting point for prioritization:

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<th>WE NEED TO KNOW WHETHER...</th>
</tr>
</thead>
<tbody>
<tr>
<td>...farmers think the information they receive is something they didn't know before.</td>
<td>...farmers think the content's tone is appropriate.</td>
<td>...the given recommendations are affordable for farmers.</td>
<td>...farmers think the content is accurate and up to date.</td>
<td>...farmers listen to the full messages.</td>
</tr>
<tr>
<td>WE NEED TO KNOW WHETHER...</td>
<td>WE NEED TO KNOW WHY...</td>
<td>WE NEED TO KNOW WHY...</td>
<td>WE NEED TO KNOW WHETHER...</td>
<td>WE NEED TO KNOW WHETHER...</td>
</tr>
<tr>
<td>...the registration process is easy for the farmers.</td>
<td>...some farmers don't use the service after registration.</td>
<td>...farmers unsubscribe from the service.</td>
<td>...farmers are able to self-register.</td>
<td>...agents feel incentivized to sell the mAgni service.</td>
</tr>
<tr>
<td>WE NEED TO KNOW WHETHER...</td>
<td>WE NEED TO KNOW WHETHER...</td>
<td>WE NEED TO KNOW WHETHER...</td>
<td>WE NEED TO KNOW WHETHER...</td>
<td>WE NEED TO KNOW WHETHER...</td>
</tr>
<tr>
<td>...agents are registering farmers properly.</td>
<td>...agents are helping farmers beyond just registration.</td>
<td>...the other key ecosystem players (e.g., middlemen, input dealers) are supportive of the mAgni service.</td>
<td>...women are using the service.</td>
<td>...</td>
</tr>
</tbody>
</table>
MONITORING PLAN WORKSHEET
Discuss how to monitor the selected areas

01 METRICS TO MEASURE

What are you investigating?

02 CHANNELS

- Business intelligence (internal)
- Interviews with marketing agents
- Other
- Phone surveys
- Registration data
- Interviews with farmers
- Embedded into mAgriservice design

03 METHODS FOR DATA COLLECTION

E.g., list questions you would ask
DATA AND INSIGHTS ABOUT THE PRODUCT SHOULD SHOW AREAS WHERE CUSTOMERS ARE DROPPING OFF THE IDEALIZED JOURNEY. **ALIGN THE WHOLE TEAM ON A PLAN TO FIX THESE BROKEN POINTS** TO IMPROVE CUSTOMER EXPERIENCE FOR THE NEXT ITERATION.

**TIME**
2 hours working session

**MATERIALS**
Worksheet

**COMPLEXITY**
High: advanced analytical skills and strategic thinking

**ROLES**
- Product manager
- Technology
- Marketing
- UX expert
COLLECT DATA ABOUT THE SERVICE THAT HAS BEEN LAUNCHED
One to two months after launch, get a snapshot about how the mAgri service is performing. The UX team should do interviews with farmers and agents to collect qualitative feedback on the service. The product team should collect quantitative data from the service usage and do high-level analysis on the performance.

MAP THE AREAS OF BROKEN USER EXPERIENCE
Print or draw out the customer journey map. Based on the quantitative and qualitative data, map all the key issues that need to be improved. Identify the top three to four issues across the journey that everyone in the room is aligned to improve.

DISCUSS HOW TO ADDRESS KEY ISSUES
As a cross-functional group, discuss some possible solutions to address the user experience issues. The group can be split into smaller groups to each work on a separate issue as well.

ALIGN ON RESPONSIBILITIES AND TIMELINE
Based on the discussion, align key responsibilities and timelines for the solution. Plan how these elements will be implemented for the next iterative launch of the product.
CUSTOMER JOURNEY ISSUES WORKSHEET
Identify broken points in the experience

01 JOURNEY STEPS

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<th>AWARENESS</th>
<th>REGISTRATION</th>
<th>FIRST-TIME EXPERIENCE</th>
<th>REGULAR USE</th>
<th>SUPPORT</th>
<th>UNSUBSCRIBE</th>
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<tr>
<td>Get to know the mAgri service</td>
<td>Sign up for the mAgri service</td>
<td>Use the mAgri service on their own</td>
<td>Continue using the mAgri service</td>
<td>Ask for help if stuck during use</td>
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02 TOP ISSUES

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03 POSSIBLE SOLUTIONS
PLAN TO BRING ALL STAKEHOLDERS TOGETHER REGULARLY TO DISCUSS PRODUCT ITERATION SO THEY ARE COMFORTABLE WITH THEIR ROLES AND RESPONSIBILITIES AROUND THIS EVOLVING PRODUCT.

**TIME**
2 hours working session

**MATERIALS**
- White board
- Post-its

**COMPLEXITY**
Medium: good product vision and planning skills

**ROLES**
Product manager
PLAN FOR NEW ITERATIONS ON THE PRODUCT
Align on the cadence for when a new product iteration should be launched. Aim for a new iteration during every new crop season, or every six months, so farmers can feel that the product is constantly improving.

PRIORITIZE KEY AREAS OF FOCUS IN EACH ITERATION
Prioritize how the resources should be balanced between improving the current service and introducing new features. The customer journey issue mapping should provide a good baseline about priorities for each iteration.

PLAN FOR QUARTERLY MEETINGS TO ALIGN ON UX PRIORITIES
Plan to complete the customer journey issues mapping once a quarter with the whole team. This can help ensure that the voice of the farmer is constantly considered and assumptions are not being made about farmer needs.

EMBED THE FARMER’S VOICE INTO THE PRODUCT CULTURE
As more team members are involved with the product, ensure new team members have visited the field and have a strong understanding of farmers and their ecosystem. Ensure meeting agenda and project plans embed activities and questions that keep the voice of the farmer alive.
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.
APPENDIX

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 mAgri (2014)**
This guest study from the M4D Impact team discusses the value of user analytics for improving mobile agriculture services.
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.

mAgrí 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 Sënèkèla and Handygo’s mKisan services, co-funded by the mAgrí 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 mAgrí Program
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