mAgri Design Toolkit
User-centered design for mobile agriculture

CREATE
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.

**mAgri**

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

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

**frog**

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


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

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

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

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

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

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

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

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

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

### Preparation

- Organization Readiness
- Team Setup
- Collaboration Tools

### Activities

- Success Criteria
- Mission Countdown
- Hypothesis Generation
- Ecosystem Mapping

- Discussion Guide
- Note-Taking Template

- In-Depth Interview
- Farming Life Cycle
- Trust Circle
- House-Farm Tour
- Intercept Interview

### Outcomes

- Recruiting Criteria
- Research Plan

- Research Insights
- Refined Hypotheses

- User Archetypes
- Life Cycle Mapping

- Ideation Exercises
- Customer Journey

- Value Proposition
- Service Blueprint
- Minimum Viable Product
- Advocate & Skeptics Map
- Business Model

- User Validation Plan

- Card Sorting
- Low-Fidelity Prototypes

- Content Considerations
- Agent Training
- Go-To-Market Strategy

- Monitoring Plan
- Customer Journey Issues

- Product Iterative Planning
WHEN TO APPLY IT

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

**ENTRY POINT: PLAN**

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.

**ENTRY POINT: DEVELOP**

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

**RECOMMENDED TOOLS:**

- Ecosystem Mapping, Recruiting Criteria,
- User Validation Plan, Discussion Guide,
- In-Depth Interview, Card Sorting, Low-Fidelity Prototypes, Trust Circle, Farming Life Cycle,
- Content Planning, Agent Training, Go-to-Market Strategy, Customer Journey Issues
Following a user-centered design approach does not guarantee a successful product; other factors need to be in place to get the desired outcome.

It is important to consider these factors when you adopt a user-centred design approach for your mAgri service:

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<th>1</th>
<th>INTERNAL BUY-IN</th>
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<tr>
<td></td>
<td>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.</td>
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<th>MARKET SIZE ASSESSMENT AND BUSINESS CASE</th>
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<td></td>
<td>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.</td>
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<th>BUDGET</th>
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<td>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.</td>
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<th>PARTNERS</th>
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<td></td>
<td>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.</td>
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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!
ARE YOU CREATING AN mAgrí SERVICE THAT IS DEEPLY ROOTED IN INSIGHTS FROM THE FIELD?
CREATE IS ABOUT IDENTIFYING THE RIGHT OPPORTUNITIES AND FIGURING OUT HOW THEY AFFECT YOUR mAgrí 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

User Archetypes
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
01 KEY ACTIVITIES
02 KEY NEEDS
03 USER ARCHETYPE WORKSHEET
Identify the key user archetypes in the ecosystem
Morning
Night
Morning
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
Ideation Exercises

**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.
01 RANDOM OBJECT

02 FREE ASSOCIATIONS

List the associations with the object that come to mind

03 ‘WHAT IF’ STATEMENTS

Turn the associations into “what if...” related to your problem area

04 FRESH IDEAS
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<th>PROBLEM AREA</th>
<th>YOUR ASSUMPTIONS</th>
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- Provocation worksheet: Apply lateral thinking to generate fresh ideas
- What if... statements
- Fresh ideas
- Random object worksheet
- List all the aspects you take for granted
DEVELOP IDEAS FOR A DIFFERENTIATED CUSTOMER JOURNEY THAT COULD GAIN FARMERS’ TRUST AND CONVERT THEM INTO LOYAL USERS.
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.

**Describe 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?), these 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

- **AWARENESS**
  - Get to know the mAgri service

- **REGISTRATION**
  - Sign up for the mAgri service

- **FIRST-TIME EXPERIENCE**
  - Use the mAgri service on their own

- **REGULAR USE**
  - Continue using the mAgri service

- **SUPPORT**
  - Ask for help if stuck during use

- **UNSUBSCRIBE**

02 WHAT HAPPENS?

03 KEY QUESTIONS FOR THE USER
CREATE

OUTCOMES
Methods and tools to consolidate your concepts

- VALUE PROPOSITION
- SERVICE BLUEPRINT
- MINIMUM 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.
## VALUE PROPOSITION WORKSHEET

Develop an aspirational value proposition for farmers

### 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?

### USER INSIGHT

What are the key user insight stories that would support this motivation?

### 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?

02 VALUE PROPOSITION
What is the one sentence you would use to sell this service?

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?
Service Blueprint

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.
SERVICE BLUEPRINT WORKSHEET
Map the service delivery

01 KEY STEPS

TRAINING
PLAN
SEED
GROW
HARVEST
MARKET

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.

**Create / Outcome**

**Minimum Viable Product**

**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.
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.
## BUSINESS MODEL WORKSHEET
Develop an initial business model

### 01 VALUE PROPOSITION

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

### 02 KEY ACTIVITIES

**What are the services that need to be performed?**

### 04 KEY RESOURCES

**What resources need to be leveraged?**

### 05 COST STRUCTURE

### 03 KEY CHANNELS

**What are the key channels involved?**

### 05 COST STRUCTURE

### 04 KEY PARTNERS

**Are there external partners that could be used?**

### 05 REVENUE STREAM
<table>
<thead>
<tr>
<th>Stage</th>
<th>Key Activities</th>
<th>Key Channels</th>
<th>Key Resources</th>
<th>Key Partners</th>
<th>Cost Structure</th>
<th>Revenue Stream</th>
<th>Value Proposition</th>
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<tbody>
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<td>01</td>
<td>What are the services that need to be performed? What are the key channels involved?</td>
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<td>What is the one sentence you would use to sell this service?</td>
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<td>What resources need to be leveraged?</td>
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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.
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**

**CONCEPT**

**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.
AGRI VAS

Agricultural Value Added Services (Agri VAS): Market Entry Toolkit (2011)
This comprehensive document explores the opportunities for Agricultural VAS and covers emerging best practices on marketing, service design, and business modeling.

mAgr 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 Sénèkèla and Handygo’s mKisan services, co-funded by the mAgr 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 mAgr Program
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