

# PROWASH HCD Workshop Tools

---

Summer 2019



*These tools were made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the PRO-WASH Award and do not necessarily reflect the views of USAID or the United States Government.*

**HEAR**

# Assumptions Tester (30 Mins)

## DIRECTIONS

- 1. Define the problem:** Write down your problem statement. For example, “How might we present data in such a way that policymakers take action?” or “How do we market toilet pans to rural communities?”
- 2. Identifying assumptions:** Review your problem statement and identify facts related assumptions. If we take the first problem statement from step 1, then the main assumption is that “Policymakers will act when they have sufficient, compelling data”, but also that “Qualitative (e.g. stories) is not good enough for policymakers.”
- 3. Formulate your hypothesis:** For each assumption, develop a testable hypothesis. This hypothesis is formulated as a conditional if/then statement. Ask yourself the following question, “If this condition is true, then what is the observable outcome?” Record the condition in the “If” field and observable outcome in the “Then” field. For example: “If policy-makers have data” (condition), then “They will act” (observable outcome).
- 4. Plan a test:** For each if/then statement, devise a test that helps you evaluate your hypothesis. Plan initially for simple tests that don’t require a lot of resources, time, or money, and which you can start doing tomorrow. For example, to evaluate the hypothesis in step 3, the test could be as follows: “Present an infographic with loads of data and see if they take action.”

## OBJECTIVE

To identify your assumptions and translate them into a set of testable hypotheses.

## PURPOSE

The problem statement of your project plan invariably includes assumptions of which you may or may not be aware. Before furthering your plan, and allocating vast amounts of resources to it, it is important to identify and plan for these assumptions.

## PARTICIPANTS

Project team

## OUTPUT

Completed Assumptions Tester template

## MATERIALS



TEMPLATE ON NEXT PAGE



PENS OR PENCILS

# Activity: Assumptions Tester

<b>Problem Statement</b> <i>What is your problem?</i>	<b>Assumptions</b> <i>Why is this?</i>	<b>Hypothesis</b> <i>If your assumption is true...then (desired solution)?</i>	<b>Validated</b> <i>Insight Validated?</i>
	→	if...   then...	→
	→	if...   then...	→
	→	if...   then...	→
	→	if...   then...	→

# Analyzing Insights (45 Mins)

## DIRECTIONS

1. Start at the beginning of the insight boards
2. Read through the Insights aloud.
3. Encourage participants to take notes on post-its during the report out.
4. After reading the insights ask the participants,
  - a. "What surprised you?" Write these down on post-its, one per note.
  - b. "What are some themes?"
  - c. What/where are the opportunities?
5. Return back to Assumptions Tracker and complete VALIDATE/INVALIDATED box.

**NOTE** There is no template for this tool. Each designer should use whatever is best for them.

### OBJECTIVE

To understand the VOC (voice of customer)

### PURPOSE

Teach people how to analyze user information and User Insights.

### PARTICIPANTS

Project team members.

### OUTPUT

An optimized final design.

### MATERIALS



PAPER OR NOTEBOOK



PENS OR PENCILS

# Empathy Map (30 Mins)

## DIRECTIONS

1. Decide what individual or group you want to learn more about.
2. Take each box one at a time. Fill in as much information as you can.
  - Box 1: What does the customer think or feel? Ask about: What really counts? Major preoccupations? Worries and aspirations?
  - Box 2: What does the customer hear? Ask about: What does their boss say? What do their friends say? What do their influencers say?
  - Box 3: What does the customer see? Ask about: their environment, friends, what the market offers.
  - Box 4: What does the customer say and do? In terms of attitude in public, appearance, behavior towards others. *Don't ask these questions, rather take notes on your observations throughout your interactions with them.*
  - Box 5: Pain. Ask about fears, frustrations, and obstacles.
  - Box 6: Gain. Ask about wants/needs, measures of success, and obstacles.
3. Review the completed tool with your team and discuss insights. How might you change your product or service to better suit your customer?

## MORE RESOURCES

<https://www.youtube.com/watch?v=QHFzIG99jvw>

### OBJECTIVE

To better understand their feelings and experiences of your ideal customer in relation to your product or service.

### PURPOSE

By making a visual representation of the relationship between your ideal customer and your product, your team will be able to enhance your product or service to better align with your ideal customer.

### PARTICIPANTS

Project team and customer/user (if available, if not you can use in-field notes and insights about customer/user).

### OUTPUT

Completed Empathy Map template

## MATERIALS

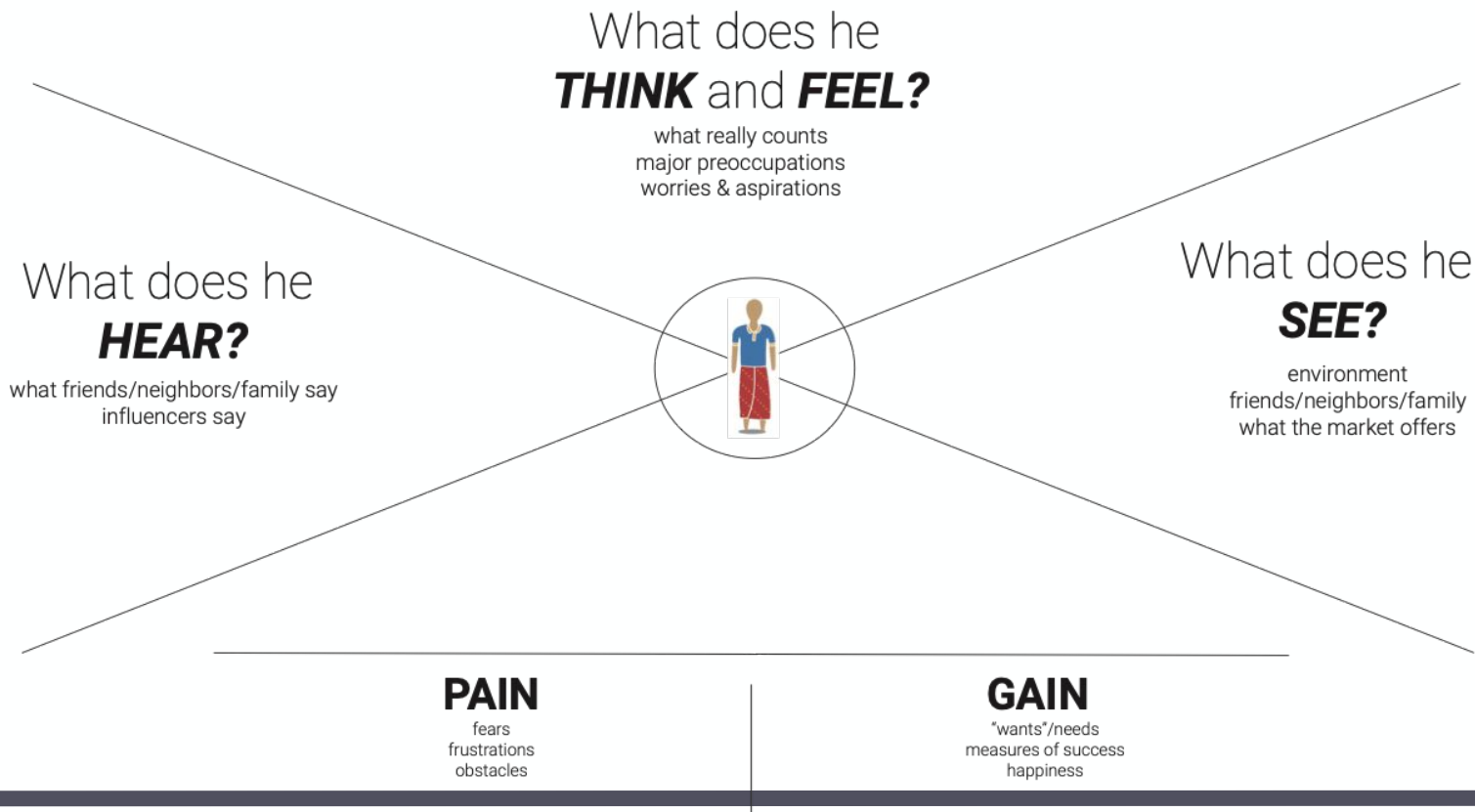


TEMPLATE ON NEXT PAGE



PENS OR PENCILS

# Activity: Empathy Map





# Stakeholder Map (30 Mins)

## DIRECTIONS

1. Look at your scope/brief:
  - Is it clear who your primary beneficiary/end-user is?
  - For whom is the product/service being designed? This may or may not be clear, depending on the mandate the team has received.
2. Review the examples on the following pages of this document.
3. On Post-It Notes, start writing all of the people, groups, and organizations/companies involved in this challenge. Use the following questions to create a comprehensive list of stakeholders:
  - Who commissioned the project?
  - Who will implement it?
  - Who provides the surrounding infrastructure?
  - Who has already proposed solutions?
  - What role does government play?
  - Who will make money?
4. Record the answers to the following questions in your notes:
  - Where do stakeholders' goals coincide? Where do they differ?
  - How will these relationships impact your product or service?

## OBJECTIVE

This tool is a way to visualise exactly who you are designing for and how. It allows you to develop a clearer picture of how all the different actors relate both to your work and each other. Remember, at iDE we are not just designing for the “end-user” but for the entire market system as it relates to the product or service.

## PURPOSE

A problem is influenced by many players. It becomes increasingly complex to understand as the number of stakeholders increases. The solution (product or service) MUST include all parties.

## PARTICIPANTS

Project team and other actors (field staff, donors)

## OUTPUT

Notes and a completed map

## MATERIALS



TEMPLATE ON NEXT PAGE



POST-IT NOTES

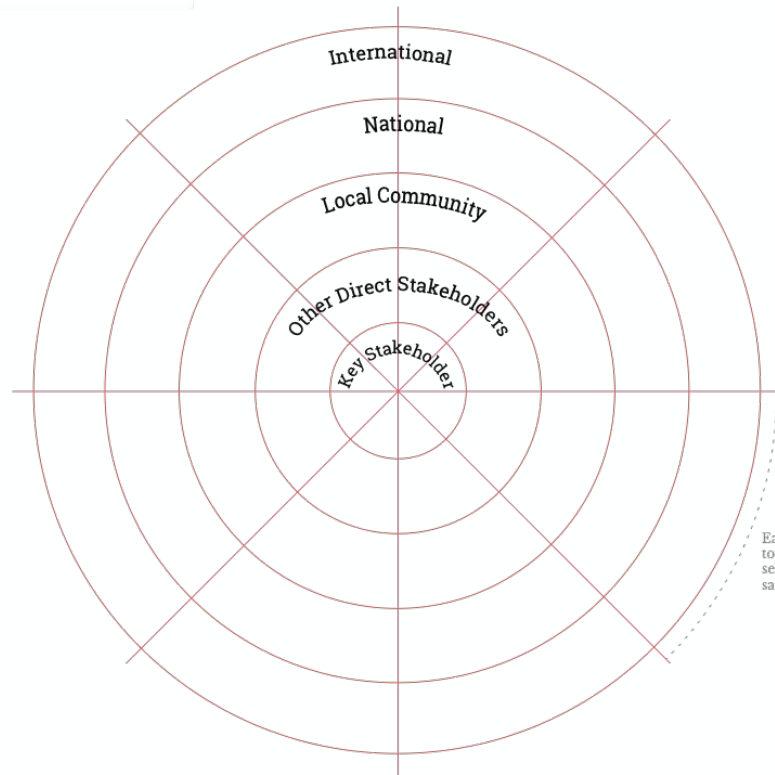


PAPER OR NOTEBOOK



PENS OR PENCILS

# Activity: Stakeholder Map



Each section can be used for topics such as belonging, self-actualisation, health, safety, environments etc



**CREATE**

# User/Actor Personas (20 mins)

## DIRECTIONS

1. Review your in-field notes and user/actor insights, looking for similarities and differences.
2. As a team, discuss some options for how to group your user/actor information. These categories may evolve as you go and that is ok. Review example the following pages to get some ideas.
3. Next, decide on a way of naming each group. The whole team should be satisfied with the names you end up with because it's these groups on which you will base the personas. Once you have your groups, break into pairs to complete the UP template.
4. For each individual or group, describe a fictional archetypal character, based on the aggregated information from the profiles in each group. Use one Persona's Template (p. 3) to describe each unique group. Talk about the person in the 1st person, "I am/I like/ I prefer/I enjoy."
  - a. All UPs should include:
    - i. Demographics such as: age range, gender, religion, average income, marital status, education level, etc.
    - ii. Resources
    - iii. Motivations/ goals
    - iv. Challenges/obstacles
    - v. Frustrations
    - vi. Experience
    - vii. Have they used a similar system/product/service before?
    - viii. A quote that encompasses describes this fictional archetype
  - b. For our purposes at iDE, there is often specific information we want to include. For example, if you are creating a UP within the framework of agriculture work, the UP should include:
    - i. Average number of children
    - ii. Geography
    - iii. Land size (does the farmer own/rent?)
    - iv. Number and type of animals
    - v. Type and regularity of water access
    - vi. Distance to the nearest town
  - c. Lastly, give each persona a fictional name and sketch a picture. Graphics are useful additions to UPs. Instead of referring to 'User Segment B' you can refer to 'Muhammad Diallo' or 'Maria Escalante.'
5. In a group, decide which groups or UPs you will be designing a solution for. Begin this process by creating needs statements. Write key needs or issues from the point of view of the user, in the 1st person "I need..." Write many needs for each persona, and then, as a group select 3 for each profile. Now that you know who you are designing for and which needs to you want to fill, you are ready to start designing!

## OBJECTIVE

To use your in-field research and user/actor insight to create fictional characters, called User/Actor Personas (UP), that represent segments of your target audience. Each persona represents a segment of users that share similar personal characteristics, motivations, and backgrounds.

## PURPOSE

When designing a new tool, service, or model it is important to take into account the types of mainstream actors/users as well as the outliers that will encounter your design. A research-based, well developed UP is a resource that can be referred to throughout the design process to keep the end-user at the center of the design.

## PARTICIPANTS

Project team and other actors (client, donors)

## OUTPUT

User personas and customer segments

## MATERIALS



TEMPLATE ON NEXT PAGE




PAPER OR NOTEBOOK



PENS OR PENCILS

# Activity: Persona Creator

<p><b>Name</b></p> <p><b>Portrait</b> Please add a picture or draw a portrait</p>  <p><b>Segment</b></p> <p><b>Occupation</b></p> <p><b>Age</b></p> <p><b>Home town</b></p> <p><b>Marital status</b></p> <p><b>Family/Friends</b></p> <p><b>Interests/Hobbies</b></p> <p><b>Short bio</b></p>	<p><b>Quote</b></p> <p>“ What is a typical quote that represents the persona’s objectives, motivations? ”</p>		
	<p><b>Motivations</b></p> <p>What drives this persona?</p>	<p><b>Goals</b></p> <p>What are the goals that this persona tries to achieve?</p>	<p><b>Frustrations</b></p> <p>What frustrates this persona?</p>
	<p><b>Enablers</b></p> <p>What enables this persona to achieve his/her goals?</p>	<p><b>Barriers</b></p> <p>What obstructs this persona from achieving his/her objectives?</p>	



# Rapid Probleming (15 mins)

## DIRECTIONS

1. Working individually each group member will write down problems that their persona has. (3 mins)
2. Share out with group.
3. Put post its in the middle of the table and have the team organize them in terms of importance: low, medium, high.
4. Pull out the HIGH Importance Post-Its and place on Flip Chart

**NOTE** There is no template for this tool. Each designer should use whatever is best for them.

## OBJECTIVE

To understand where people's opinions of where the most necessary aspects lie.

## PURPOSE

To start thinking through problems and narrowing down what is more to least important in order to start coming towards solutioning.

## PARTICIPANTS

Project team members.

## OUTPUT

An optimized final design.

## MATERIALS



PAPER OR NOTEBOOK



PENS OR PENCLS

# Parallel Design - 20 Mins

## DIRECTIONS

1. Using the HIGH important problems...
2. Each team member/designer independently creates their design based on the same instructions and parameters on a piece of paper. Visuals highly encouraged.
3. Going around the group, each designer describes their design
4. After each design has presented their design, the team works together to create an optimal design based on similarities, taking the best ideas from each design using the canvas.

## OBJECTIVE

To create several initial designs from the same set of requirements, which leads to an optimized final design.

## PURPOSE

Parallel design allows for a range of ideas to be generated quickly and cost effectively, several approaches to be explored at the same time, thus compressing the concept development schedule, and concepts generated to be combined so that the final solution benefits from all ideas proposed.

## PARTICIPANTS

Project team members.

## OUTPUT

An optimized final design.

## MATERIALS



PAPER OR NOTEBOOK



PENS OR PENCLS

# Activity: Parallel Design

<i>Problem Statement</i>	<i>All Ideas</i>	<i>Common Ideas</i>
<i>Solution Pathway</i>		





# Analysis Venn Diagram - 20 Mins

## DIRECTIONS

1. Begin by writing what you want to analysis in the center of the diagram.
2. Identifying three factors per category (desirability, viability, feasibility) that are pivotal to the success of your project and write them onto your template.
  - Viability (or Opportunity) factors reflect the current situation of the affiliated market systems infrastructure, enabling environment, and external processes. Some example factors include: market demand, profitability, and risk.
  - Desirability (or Will) factors measure the participants and/or communities' desire to engage in this project. Some example factors include: women's empowerment (if project is primarily with women), resource availability, service availability, cultural fit/appropriateness, and past experiences.
  - Feasibility (or Skill) factors look at your product or service from a more technical lens. Some example factors include: geography, seasonality and infrastructure.
3. Once you have selected your 9 factors, give them each a score. Utilize evidence from in-field observation and research to how you code each factor. Use the coding technique *Traffic Light Analysis* to color in each factor with the selected color.

## OBJECTIVE

To identify areas of strength or weakness that could contribute or deter from the success of your project.

## PURPOSE

To establish which factors might inhabit the project's progress or viability in order to plan around those factors upfront and allow for the greatest likelihood of success.

## PARTICIPANTS

Project team and other actors (end-users, clients, etc.)

## OUTPUT

Completed Analysis Venn Diagram template

## MATERIALS



TEMPLATE ON NEXT PAGE



IN-FIELD NOTES RELATED TO PROJECT

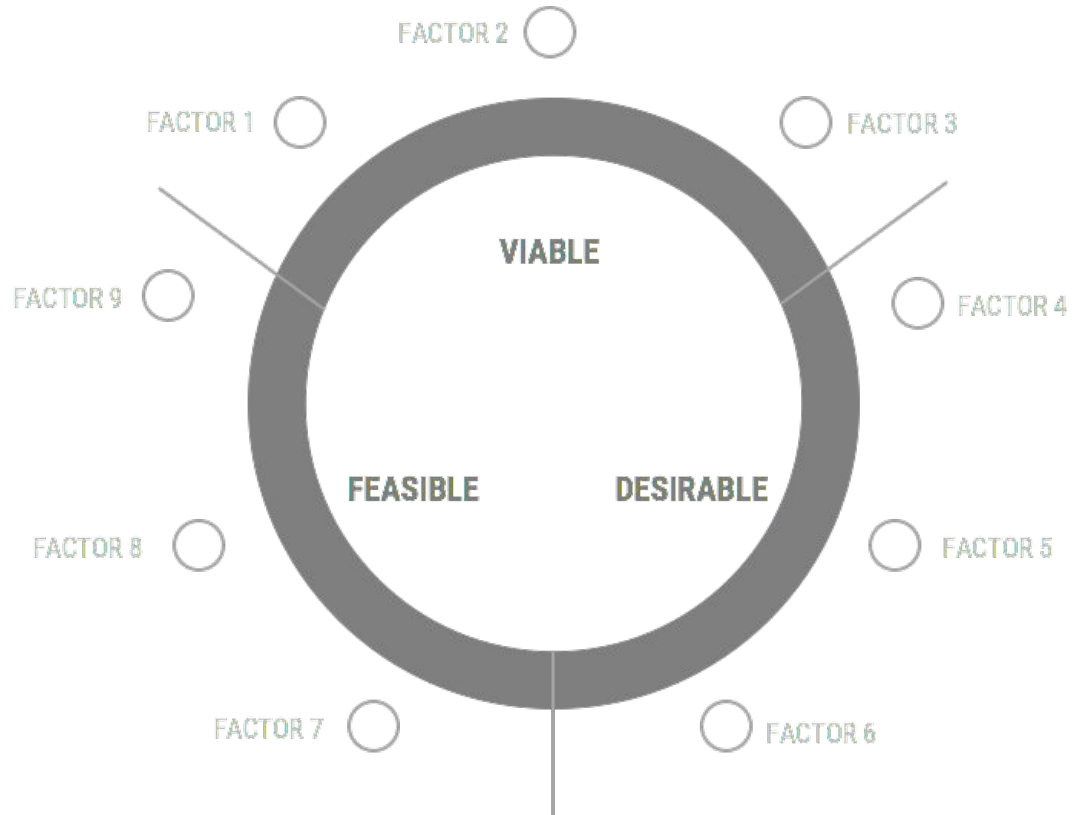


RED, YELLOW & GREEN MARKERS/ COLORED PENCILS



Strength of Factor for Behavior	
Yes/Strong	
Sometimes/Occasional	
No/Weak	

# Analysis Venn Diagram



# Storyboarding - 20 Mins

## DIRECTIONS

1. Write the storyline, before drawing the scene Imagine details in each scene. Who is going where? How? What's the purpose of each actor in each scene? Do they use something physical to interact?
2. Draw the scene. Visualize it. Imagine the specific dialogues based on the storyline.

Questions to prompt storyboarding:

Before: • How do you expect people to discover the product? Where? Who? How? What is going to be the “teaser” that makes people make the final decision?

During: • How / who do you expect it to be delivered? How are you going to upload it? And transport it? And download it?

After: • Who is going to install it? How? How do you think they will know how to install it? Use: • Is there anything different in the usage? From what villagers are used to? • How do you expect the “word of mouth” to be generated?

Who/what do users see/hear/touch/understand?

## OBJECTIVE

To create the story behind your solution.

## PURPOSE

Storyboarding allows participants to creatively think through how their final solution/solutions functions between actors and service.

## PARTICIPANTS

Project team members.

## OUTPUT

An optimized final design.

## MATERIALS



PAPER OR NOTEBOOK



PENS OR PENCILS

# Storyboarding - 20 Mins

