DECEMBER 2019

Process Guidelines

Designing for Shelter Behavior Change

Habitat for Humanity®
Terwilliger Center for Innovation in Shelter

Building and *expanding* inclusive housing markets

PREFACE

Through a collaboration with the Terwilliger Center for Innovation in Shelter, the University of Notre Dame Keough School of Global Affairs Integration Lab (i-Lab) team has assembled a best practices guide designed using secondary research and lessons from summer 2019 fieldwork in Mexico and India. It provides practitioners with guidance on the application of human-centered design that aims to promote lasting behavior change. The following phases, steps and tools present various strategies that will help practitioners wherever they are in the design process in order to: better understand their end user (who), develop greater insight regarding the desired social and behavior change (what), accurately diagnose existing behaviors (why) and brainstorm ideas on how to promote market-based interventions through leveraging appropriate opportunities (how).

INTRODUCTION

The framework used in this guide combines Design Thinking and Behavior Change methodologies and is tailored to the shelter sector. The resulting Designing for Shelter Behavior Change (DSBC) framework is derived from the need to design market-based interventions that prioritize human needs and use behavior change to achieve more sustainable impact at scale.

The guide is sectioned into four phases meant to mirror the *Designing for Behavior Change Framework* (TOPS 2017, p. 7) but enriched with specific design tools to distill and integrate learnings through the phases and ultimately deliver more effective and targeted interventions. This process invites iteration, where backtracking is necessary and encouraged.

Behavior Change **+** *Design Thinking*
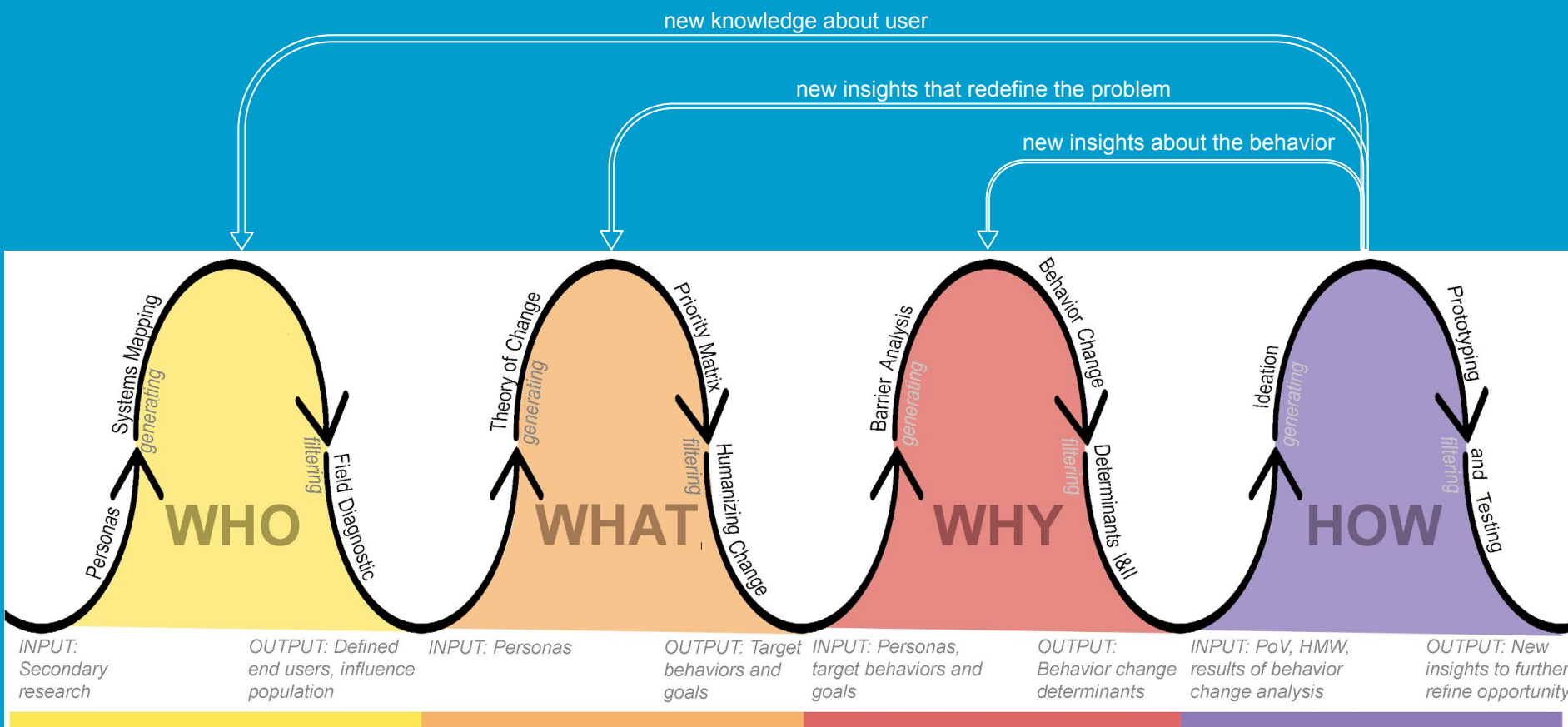
Designing for Shelter Behavior Change (DSBC)

SETTING THE STAGE

Regardless of project status, the guide provides the necessary tools to assess the direction and help redirect the course of the project. The schematic below provides the general flow of the Process Guidelines. Each phase (who, what, why, and how) introduces a GENERATIVE STEP that expands perspectives and a FILTERING STEP that focuses the process. The number of generative and filtering steps vary per phase.
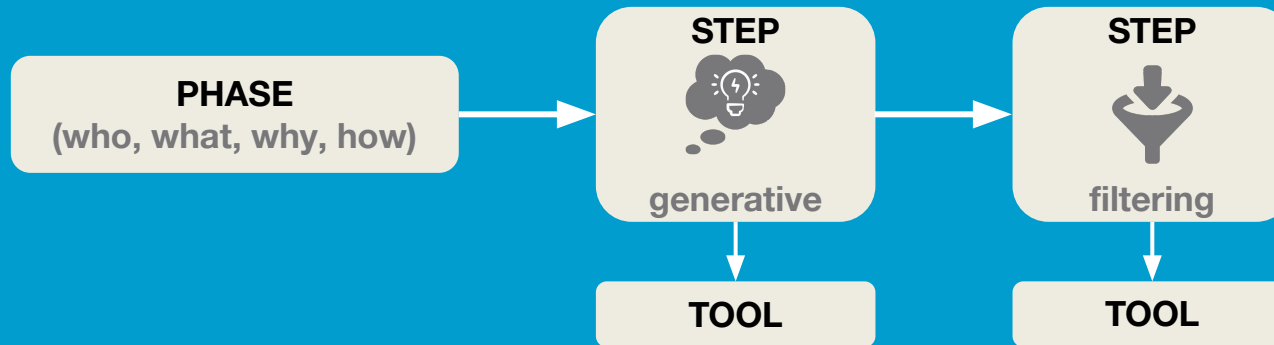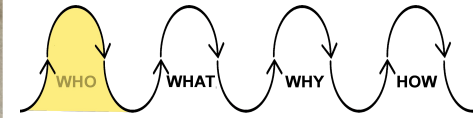

Important tips that will better serve a project (Knapp et al. 2016):
- The first time going through the process from beginning to end is best executed over five days.
- It is highly recommended that new projects undergo the process from beginning to end at least once and then circle back as needed.
- When forming a team, 1) keep the size to seven or fewer 2) team members involved should be kept the same whenever possible and 3) try to include the following six roles: decisioning making manager/leader, financial expert, marketing expert, customer expert, technology or logistics expert, and design expert.
- Create the appropriate space for design thinking with plenty of whiteboard space, free of interruptions and distractions (cell phone and laptops prohibited), set ground rules, and have the required materials on hand (post-its, timer, butcher paper or flip charts, markers, and refreshments).

TABLE OF CONTENTS

PHASES →

↓ STEPS

WHO WHAT WHY HOW

Steps
- ❏ Personas
- ❏ Systems Mapping
- ❏ Field Diagnostic

The user

WHO

Guide the design process by continuously consulting and updating this living tool

30 mins

This step synthesizes and frames the learnings gathered through secondary research and through an internal discussion. It represents your understanding of the end user. Take what you know about the end user and fill out the template categories: personality traits, hopes, motivations, and fears. At this stage, some details can be assumed; all the details provided will be validated and/or updated by the end of this phase using the *Field Diagnostic*. Although generalizations are difficult, try to arrive to a consensus and limit the number of personas to three for each end user.

The *persona template* is provided in the Appendix section of this document. For more clarity and direction, a *persona example* is also provided.

W H O

In Practice:
- Consult qualitative and quantitative research and experts within the organization
- Translate findings into experiences, needs and aspirations of end user/influence population

BENEFITS: Minimizes assumptions about the needs and priorities of the end user; this will expose gaps in knowledge

INPUTS: Secondary research

OUTPUTS: 1 to 3 PERSONAS

Tip: Include diverse group in this discussion, particularly those who have directly interacted with the end user.

Systems Mapping
framing the environment

Enhance understanding of end user by identifying key stakeholders and influencers for each persona

In Practice:
- Take note of the type and strength of influences
- This step classifies relationships and reveals possible future partnerships

30 mins

This step maps out how each persona receives and shares information. The result is a tool that represents the persona's ecosystem as it stands today. To generate this map, complete the following steps:

1. Write the persona's name in a circle in the center of a large sheet.
2. Brainstorm possible influencers and transfer each to a post-it. Arrange the post-its around the persona, grouping them under themes/categories.
3. Draw lines between the persona and stakeholders to indicate three possible types of relationships: information exchange (blue line), influence (red line) and trust (green line). Use solid lines to indicate a strong relationship and a dashed lines to indicate a weak relationship. Interrelationship between stakeholders can be represented in the same format.

The ***systems map template*** and ***example*** are provided in the Appendix section of this document.

BENEFITS: Acts as a source for key informant interviews and engagement strategy

INPUTS: 1 to 3 PERSONAS and secondary research

OUTPUTS: SYSTEM MAP with persona influence groups (1 per PERSONA)

Tip: Include diverse group in this discussion, particularly those familiar with the end user or engaged in the local market.

Field Diagnostic
validating assumptions

Engage with the end user for a deeper understanding of personas and their surrounding ecosystem

Prior to engagement, vet participants using a brief questionnaire to ensure a persona match. For example, a household vetting questionnaire validates income bracket and home ownership.

2 days

Observational Visits: Directly engage with segments of the end user. Observe their interactions with the housing market (at home or work), ask more detailed questions about their experiences in the housing market and interactions with others in that ecosystem. Probe for pain points, workarounds, and aspirations. Follow up questions should establish the reasons behind their experience. Ensure an appropriate sample size. Update personas based on learnings.

1 day

Key informant Interviews: Using the systems map, identify different stakeholders for interviews, prioritizing stakeholders with multiple relationship links to the persona. Gather insights from key community leaders and experts in the field of construction. When possible, engage individuals at different levels of within a stakeholder's organization. These conversations provide valuable contextual, big-picture perspective of the construction environment, barriers, and relationships. Update the systems map based on learnings.

Steps
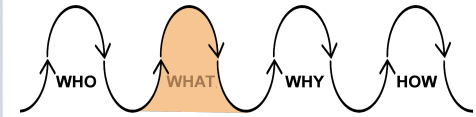- ❏ Theory of Change
- ❏ Priority Metrics
- ❏ Humanizing Change

The behavior

WHAT

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Theory of Change
defining the problem

Identify the long-term goal and questions that must be answered by the end of the process

The following activities in this step ensure the chosen problem will address the overall organizational goals. Engaging in all the activities is encouraged as it will illustrate different ways of seeing the problem.

30 mins — *Who-What-Why-How Framing*: Use the *Design for Behavior Change Framework* (TOPS 2017, p. 7) to outline the process of solving the selected problem through behavior change. The framework outlines basic goals, participants, determinants, and activities or interventions. The long-term goal should be clearly stated and agreed upon. See *example* in Appendix.

15 mins — *Change Mapping:* Craft a simple, human-centered visualization of this framing to anchor the design process. 1) List the target/influence groups on the left (WHO); 2) the desired ending on the left (WHAT); and 3) the behaviors that must be changed to do so in the middle (HOW). See *example* in Appendix.

15 mins — *Problem Framing:* Turn the problem in an opportunity and frame it into a *How Might We* (HMW) statement. The HMW should be solution-based, human-centered, and concise.

BENEFITS: Ensures selected problem aligns with organizational goals

INPUTS: PERSONAS

OUTPUTS: Problem statement

Tip: Work backwards; start out broad and then hone in on the problem

Evaluate each identified behavior using a two-dimensional matrix to prioritize targeted behaviors

20 mins

This exercise will encourage a critical assessment of the identified behaviors and their relevance to the HMW Statement. Write each identified behavior on a post-it and map it on a 2x2 evaluating the level of impact (low to high) if this behavior were changed and level of difficulty (low to high) in changing this behavior. Difficulty can be assessed by how much effort and resources are needed, considering the prevalence of the behavior and its influence on local markets.

In Practice:
- Revisit identified behaviors from the previous step and get everyone's buyoff
- Take identified behaviors and evaluate them based on impact and difficulty
- Ensure there is consensus on which behaviors should be prioritized

BENEFITS: Defines the scope of the problem from the perspective of-end user behaviors
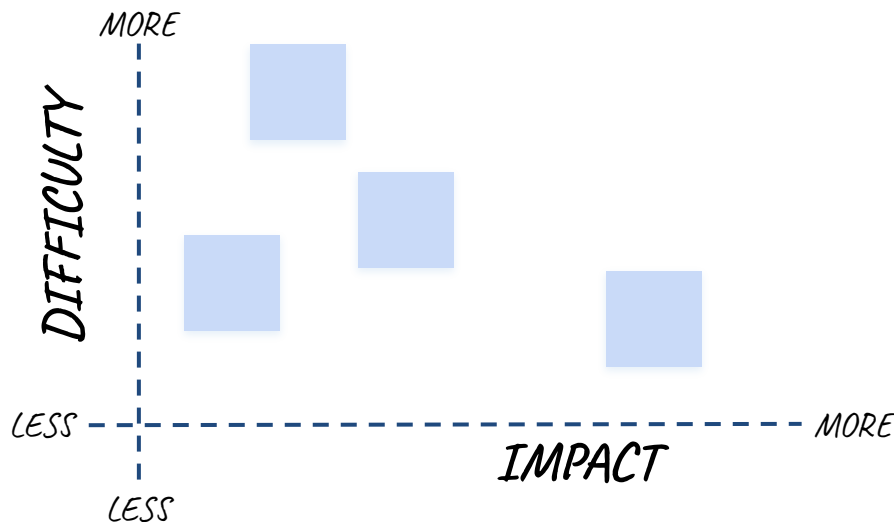
INPUTS: HMW statement and behaviors

OUTPUTS: Prioritized target behaviors

Tip: Include all the experts in this discussion (management, finance, marketing, etc.)

Humanizing Change
aligning behavior change targets to personas

Enrich personas by applying a series of tools and activities that help align them to the behavior change targets

In Practice:
- Test behaviors against each Persona using the Five Whys activity
- Expand on Persona tool by adding a PoV and BC targets

5 mins

Point of View (PoV): Using the persona and the behavior change diagnostic, construct Points of View (PoV) statements for the persona:

[USER] needs [USER'S NEED] to make him/her feel [EMOTION] in a world where [INSIGHT]

See *example* in Appendix.

15 mins

Five Whys: Discuss and refine the statement as needed to capture the persona's needs and underlying motivations: PoV = Persona + Needs + Insight. To assist, probe the PoV further. Ask *why* five times to understand underlying emotions that underpin needs and desires.

15 mins

BC Targets: Develop specific behavior change targets for each persona that address their needs and achieves the broader target goals established by the organization

BENEFITS: Ensures behaviors are targeted to the PERSONAS

INPUTS: Prioritized target behaviors

OUTPUTS: Target behaviors (tailored to each PERSONA) and goals

Tip: If behaviors don't align with Persona or organizational goals, circle back through this phase to generate more targeted behaviors

WHO WHAT WHY HOW
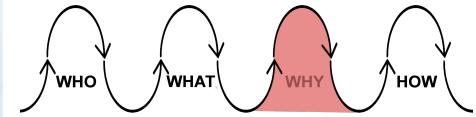
Steps
- ❏ Barrier Analysis
- ❏ Behavior Change Determinants I
- ❏ Behavior Change Determinants II

The determinants

WHY

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Barrier Analysis
identifying root causes

Measure how the end user's situation and perceptions prevent or encourage the behaviors

20 mins

Take each *Persona* and brainstorm as many reasons as possible as to why or why not a behavior may be adopted.
- Use post-its to list the barriers and drivers that could influence each *Persona* to adopt the behavior.
- Consult organizational sources and *Field Diagnostic* to generate these.

Barriers	Drivers
key factors likely impeding adoption of the behavior	key factors influencing the end user's adoption of the behavior

In Practice:
- Invite diverse perspectives to share learnings and co-create solutions together
- Find themes
- Repeated iterations are encouraged and often necessary

BENEFITS: Identifies root causes of pain points and opportunities

INPUTS: PERSONAS and target behaviors and goals

OUTPUTS: List of barriers and drivers

Tip: Stick to what you know or have learned. Avoid making assumptions.

W H Y

Evaluate how barriers and drivers influence the end user's rational side, emotional side, and environmental context

30 mins

Categorize ideas based upon the Rider, Elephant & the Path behavior change framework developed in the book *Switch: How to Change When Change Is Hard* (Heath et al. 2010). The RIDER represents one's rational side, the ELEPHANT one's emotional side and the PATH represents one's environmental context. Identify which behavior influencers fit within the different categories then use the SCORECARD I to prioritize their relative importance.

The *scorecard template* is provided in the Appendix section of this document.

In Practice:
- Categorize ideas
- Apply evaluation matrix to each category
- Prioritize behavioral influencers based on scores

BENEFITS: Refined filtering considerate of the mechanisms of behavior change

INPUTS: List of barriers and drivers

OUTPUTS: Targeted barriers and drivers

Tip: Include all the experts in this discussion (management, finance, marketing, etc.)

Behavior Change Determinants II
selecting critical barriers and drivers

Analyze the most critical barriers and drivers for the current behaviors

In Practice:
- Take the behavior(s) and evaluate them using the *SCORECARD II*
- Use results to filter the list derived from the Barrier Analysis

30 mins

This step categorizes different factors shown to motivate (drivers) or impede (barriers) the adoption of a behavior for a given group of people. The most significant determinants that influence behavior are perceived self-efficacy, perceived social norms, perceived positive consequence, and perceived negative consequences. Using the list of twelve determinants, score each potential behavior. Depending on project scope, select the most compelling behaviors to carry forward in the process. Work through example below for practice.

The **scorecard template** and **example** are provided in the Appendix section of this document.

BENEFITS: Prioritize and develop ideas for market-based interventions

INPUTS: Targeted barriers and drivers

OUTPUTS: Behavior change determinants

Tip: When engaging with the persona, questions about these determinants will be key.

The opportunities

HOW
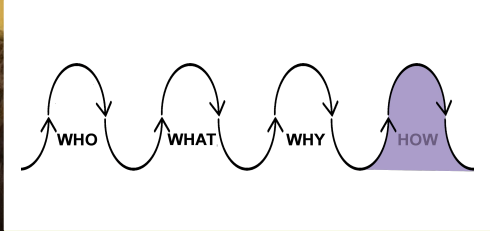
Steps
- ❏   Ideation
- ❏   Prototyping
- ❏   Testing

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Ideation
transforming knowledge into ideas

Imagine how to address the target behavior goal by engaging in multiple rounds of ideation and exploring possible opportunities

Freestyle: Come up with as many ideas targeting a specific behavior change goal and further categorize them into several major groups. Repeat this step as needed. Using a topic or theme can help to frame further iterations of Freestyle ideation.

5 mins

Crazy Eights: This exercise has participants identify one idea from those ideas generated during Freestyle and develops that idea further, sketching up eight variations of what the idea might look like in practice in 8 minutes. Participants then present their ideas. Allow the team to explore the idea space, possibly identifying commonalities or opportunities to combine ideas or further develop certain ideas that generate momentum in the room. The results should yield a refined set of ideas.

30 mins

An *example* is provided in the Appendix section.

In Practice:
- Invite diverse perspectives to share learnings and co-create solutions together
- Find themes
- Repeated iterations of Freestyle are encouraged and often necessary

BENEFITS: Encourage the unfiltered generation of ideas

INPUTS: PoV, HMW and results of behavior change analysis

OUTPUTS: Refined ideas

Tip: There is no judgement in visual expression. Encourage wild ideas. Discard no ideas!

Prototyping
refining ideas and exploring opportunities

Capture the opportunity in physical form to further refine it and test assumptions

In Practice:
- Assess possible interventions with an idea scorecard
- Select up to 3 testable solutions
- Prepare evaluation to measure behavior change

30 mins

This step is designed to test primary determinants and then use the identified determinants to develop three different prototype interventions to be tested. Use the following factors for each persona: Behavior Change Goals, Hypothesis, Assumptions, Design Requirements. Split into groups and explore ways in which to develop prototypes designed to capture behavior change insights through a three stage process:

1. Develop behavior change diagnostic activity or pre-test to capture baseline
2. Develop simulated market-based intervention designed to produce behavior change
3. Develop behavior change diagnostic activity or post-test to determine where if any change has occurred

An *example* is provided in the Appendix section.

BENEFITS: Allows for low-fidelity product/service testing

INPUTS: Refined ideas

OUTPUTS: Up to 3 testable solutions

Tip: If prototype seems infeasible, circle back through ideation to recover a discarded idea, i.e. prototypes can spark new ideas

Use generative sessions with end user to elicit feedback and measure any change in attitudes

30 mins

This step tests the three different prototypes with the end user to determine their comparative effectiveness. A pre- and post-test is administered to all groups to determine if there was any identified attitudinal change based upon the different interventions.

After determining which intervention was most impactful, key insights and feedback are taken back through different phases of the process, as needed; this includes updating tools in the WHO, refining the prioritization criteria in WHAT, reevaluating the barriers and drivers in the WHY, and finally refining the intervention in HOW.

In Practice:
- Seek end user feedback and clear up key assumptions
- Ask why and invite co-creation
- This is an iterative process

BENEFITS: Obtain a better understanding of the end user, test assumptions and verify viability of opportunity

INPUTS: Up to 3 testable solutions

OUTPUTS: New insights to further refine opportunity

Tip: Testing results require revisiting the who, what and/or why stages of the process, i.e. revisit ideation stage since testing creates new ideas for the project

Human Centered

"People of our economic status build incrementally, as finances become available. We buy land, build a basic, sometimes temporary structure, and improve and expand with time."

- *Homeowner, Mexico 2019*

TARGETED INTERVENTION

Behavior Change

"Low-income housing materials are cement and block, culturally, because it signifies solidity and resistance; it's most economical because it allows progressive building and it's most readily available and widely distributed."

- *Instituto Mexicano Del Cemento Y Del Concreto, Mexico 2019*

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Appendix
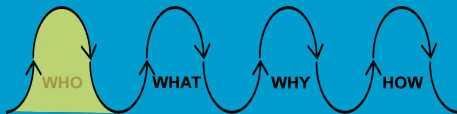
Phase: WHO

Example: Persona

Template: Persona

Example: Systems Map

Template: Systems Map
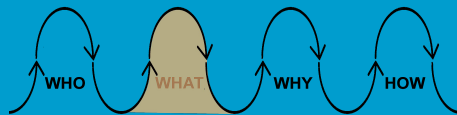
Phase: WHAT

Example: Who-What-Why-How Framing

Example: Change Mapping

Example: Problem Framing

Example: Point-of-View (PoV)

Phase: WHY

Template: Scorecard I

Example: Scorecard II

Template: Scorecard II

Phase: HOW

Example: Crazy Eights

Example: Prototyping

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Name | Moniker
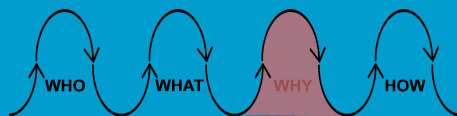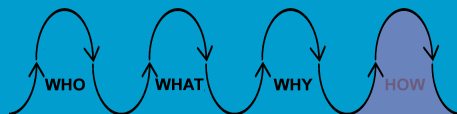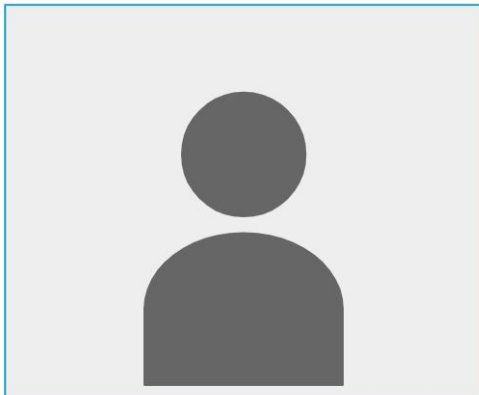
GENDER: ………………...

AGE: …….

OCCUPATION: ………………....

EDUCATION: ………………....

INCOME LEVEL: ………………....

LIVES WITH: ………………....

"[Quote that captures the essence of the details below, but in the person's own words]."

-Source

PERSONALITY TRAITS:

‣ …………………………………………..

‣ …………………………………………..

‣ …………………………………………..

‣ …………………………………………..

MOTIVATIONS:

‣ ……………………………………………

‣ ……………………………………………

‣ ……………………………………………

‣ ……………………………………………

HOPES:

‣ ……………………………………………

‣ ……………………………………………

‣ ……………………………………………

‣ ……………………………………………

FEARS:

‣ ……………………………………………

‣ ……………………………………………

‣ ……………………………………………

‣ ……………………………………………

* templates

W H O Template: Persona

Mauricio | The Provider

GENDER: Male

AGE: 55

OCCUPATION:

EDUCATION: Secondary level

INCOME LEVEL: $535 (monthly family income)

LIVES WITH: Extended family - wife, children (daughter-in-law and sons) and grandchild

"We are a family with six daughters but all are given a small space; so, as they have made life choices that's how we decided to build our home."

ND Home Owner Interviewee

PERSONALITY TRAITS:

‣ Multiple sources of income

‣ Draws inspiration for house improvements from neighbours

‣ Thinks that experience is more important than a certificate

‣ Finds masons through references

HOPES:

‣ Family-oriented

‣ Wants to expand vertically as family grows

MOTIVATIONS:

‣Financial constraints

‣ Strong sense of preferences with the emphasis on physical appearance

FEARS:

‣ Increase in materials cost (budget)

‣ Insecure construction

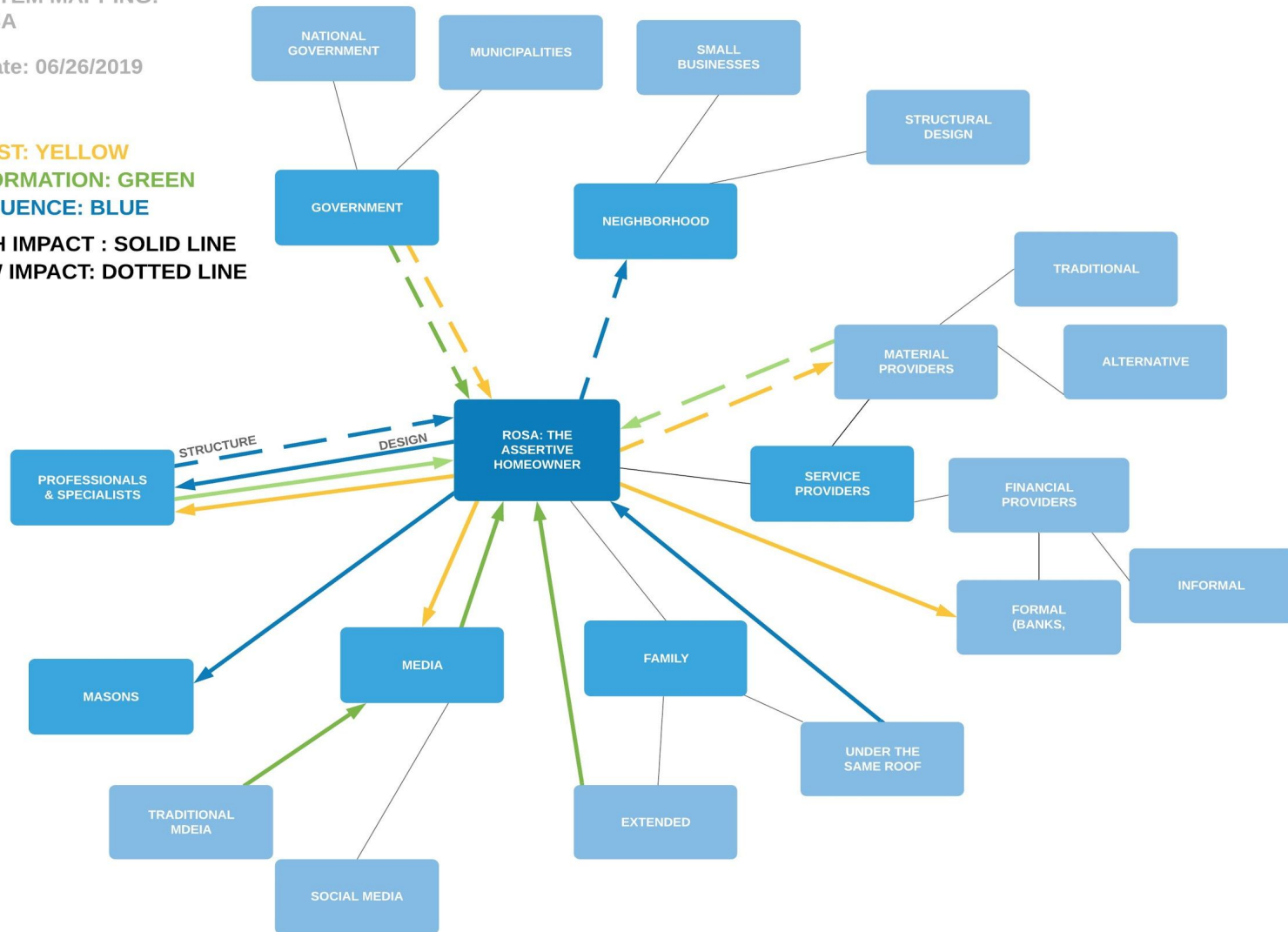‣ Dishonesty from masons, including stealing valuable things from home or lying about the cost

W H O   Example: Persona

Primary Influencers

Primary Influencers

Persona

Primary Influencers

Primary Influencers
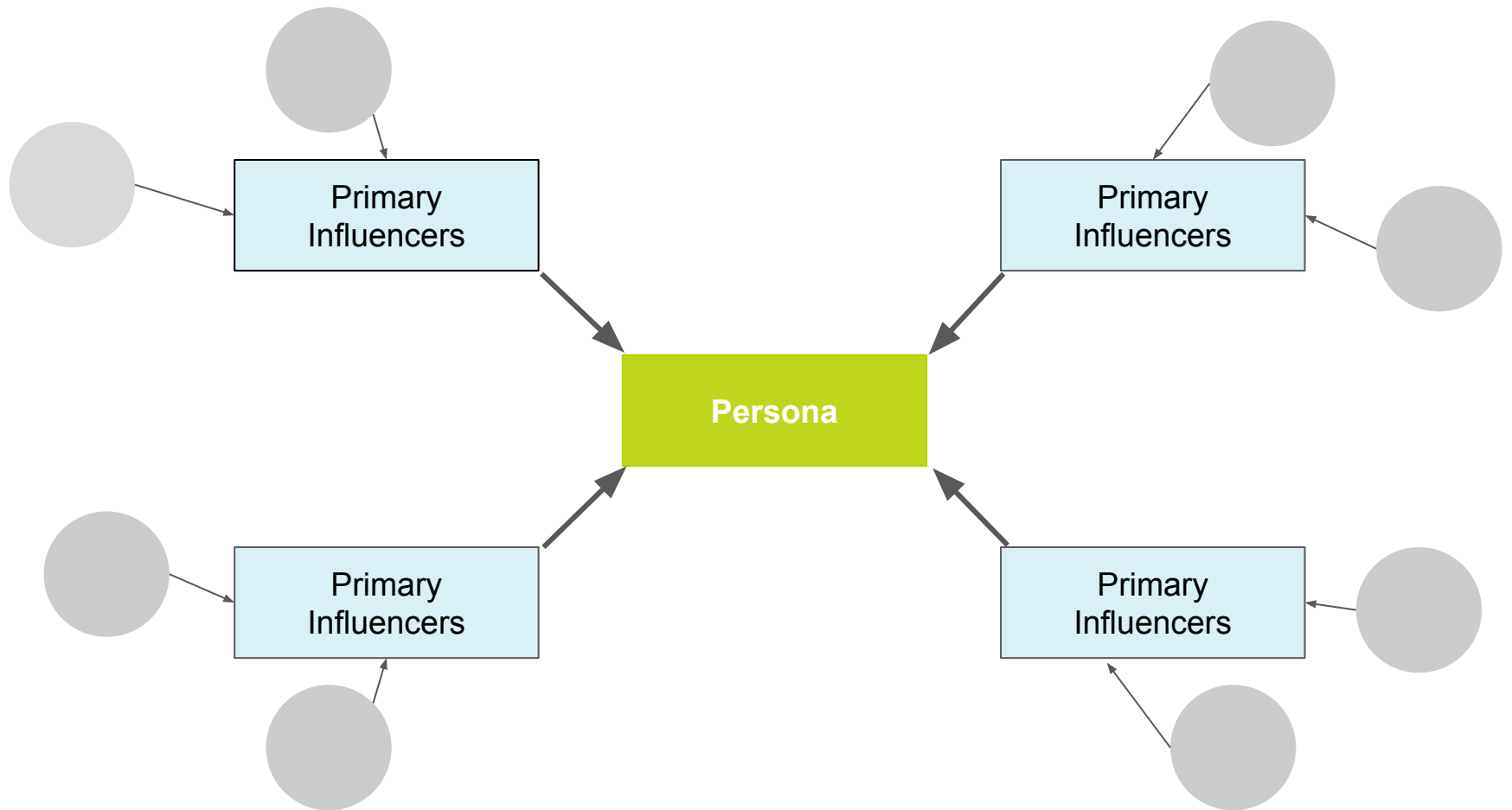
templates

HOUSEHOLD
SYSTEM MAPPING:
ROSA

Date: 06/26/2019

TRUST: YELLOW
INFORMATION: GREEN
INFLUENCE: BLUE

HIGH IMPACT : SOLID LINE
LOW IMPACT: DOTTED LINE

NATIONAL GOVERNMENT

MUNICIPALITIES

SMALL BUSINESSES

STRUCTURAL DESIGN

GOVERNMENT

NEIGHBORHOOD

TRADITIONAL

ALTERNATIVE

MATERIAL PROVIDERS

ROSA: THE ASSERTIVE HOMEOWNER

STRUCTURE

DESIGN

PROFESSIONALS & SPECIALISTS

SERVICE PROVIDERS

FINANCIAL PROVIDERS

INFORMAL

FORMAL (BANKS,

MASONS

MEDIA

FAMILY

UNDER THE SAME ROOF

TRADITIONAL MDEIA

EXTENDED

SOCIAL MEDIA

W H O Example: Systems Map

Behavior	Priority Group or Influencing Group (s)	Determinants	Bridges to Activities	Activities
To promote this Behavior…	…among this audience… Priority Group: Influencing Groups:	….we will research this Determinants*… *This can only be determined by conducting Barrier Analysis	…and promote this Bridges to Activities (priority motivators and priority barriers)…	…by implementing these Activities.

Stages of Designing for Behavior Change framework (TOPS 2017: 7).

WHO The User	WHAT The behavior	WHY The Determinants	HOW The Opportunities
End User: low income households and construction workers (masons) Influencing population: material providers, mature masons, hardware store owners, family, and community	To promote this behavior… 1) Light Construction material - prefabricated panels - Joist and vault 2) Codes and regulations - ventilation, illumination, - distribution, earthquake resilience 3) Household and Mason interactions	Identify root causes (barriers) and opportunities (drivers)… - issues with trust and honesty (finances) - skill (information gap) - character - information feedback loops	By implementing activities… 1) Early adopters and influencing groups (young mason, local hardware store) 2) Provide opportunity for material engagement

W H A T Who-What-Why-How Framing

Look at the problem working backwards. You are answering: If _____ happens, then _____ will happen, and _____ will be the result:

Household → hire mason → consult hardware store → buy materials → build resilient home

Mason → get referral → consult hardware store

W H A T   Example: Change Mapping
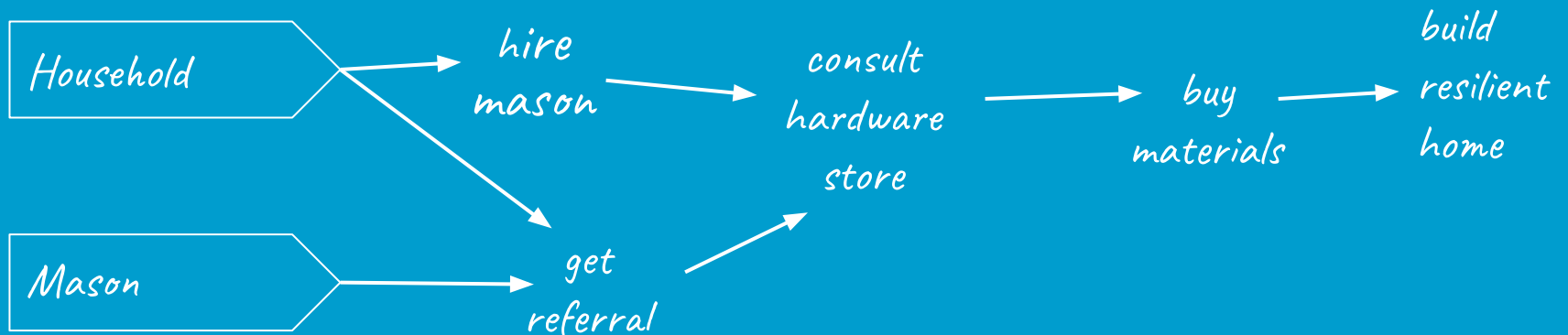
Use the fill-in-the-blank template(s) to open up for ideas to solve and clarify your challenge. Use insights gathered to form the statement.

- **HOW:** acknowledges and helps us set aside prejudices or prescriptive briefs
- **MIGHT:** emphasizes open mindedness that will allow for exploration of many ideas. There is not the only solution.
- **WE:** reminder of the collaborative effort and need for teamwork in deciding on the idea that best addresses the problem.

How Might We...help [USER] solve/capture/fulfill [CHALLENGE/OPPORTUNITY/NEED] in order to [IMPACT/GOAL/OUTCOME]

or

How Might We...redesign [SPECIFIC EXPERIENCE] for [USER] in order to [IMPACT/GOAL/OUTCOME]

EXAMPLE: How Might We create a baby warming device that helps parents in remote villages give their dying infants a chance to survive? (Kelley 2013)

W H A T   Example: Problem Framing

Use the fill-in-the-blank template below to look at your challenge from the point-of-view of your user:

[USER] needs [USER'S NEED] to make him/her feel [EMOTION] in a world where [INSIGHT].

USER is a noun, i.e. organization or person
USER'S NEED is a verb, i.e. action or requirement
EMOTION is an identified circumstance, perception or relationship
INSIGHT is an identified friction that is actionable. It's not a fact.

<u>**EXAMPLE**</u>**: Rosa** *needs* **a way to be informed about construction best practices** *to make her feel* **empowered over decisions regarding her home** *in a world where* **she feels uncertain about the quality of work provided by masons and has limited time resources**.

W H A T   Example: Point-of-View (PoV)

Drawing upon the framework developed in the book *Switch: How to Change When Change Is Hard*, the following scorecard provides a way to evaluate what type of influencing factors are relevant for a given behavior. Are the drivers or barriers compiled earlier primary rational, emotional and/or context oriented?

<div style="border:1px solid #ccc; background:#eee; padding:1em;">

SCORECARD I

Direct the Rider   ___
- Follow the Bright Spots (*what is working well*)   ___
- Script the Critical Moves (*focus on specific behaviors*) ___
- Point to the Destination (*focus on the larger impact goals*) ___

Motivate the Elephant   ___
- Find the Feeling (*5 why, understand key emotions*)   ___
- Shrink the Change (*make change easier to tackle*)   ___
- Grow Your People (*cultivate/build upon social networks*) ___

Shape the Path   ___
- Tweak the Environment (*adjust availability*)   ___
- Build Habits (*develop effective cues for action*)   ___
- Rally the Herd (*community engagement/involvement*)   ___

                                              TOTAL   ___

</div>

Problem: _____ **Potential Behavior**_____

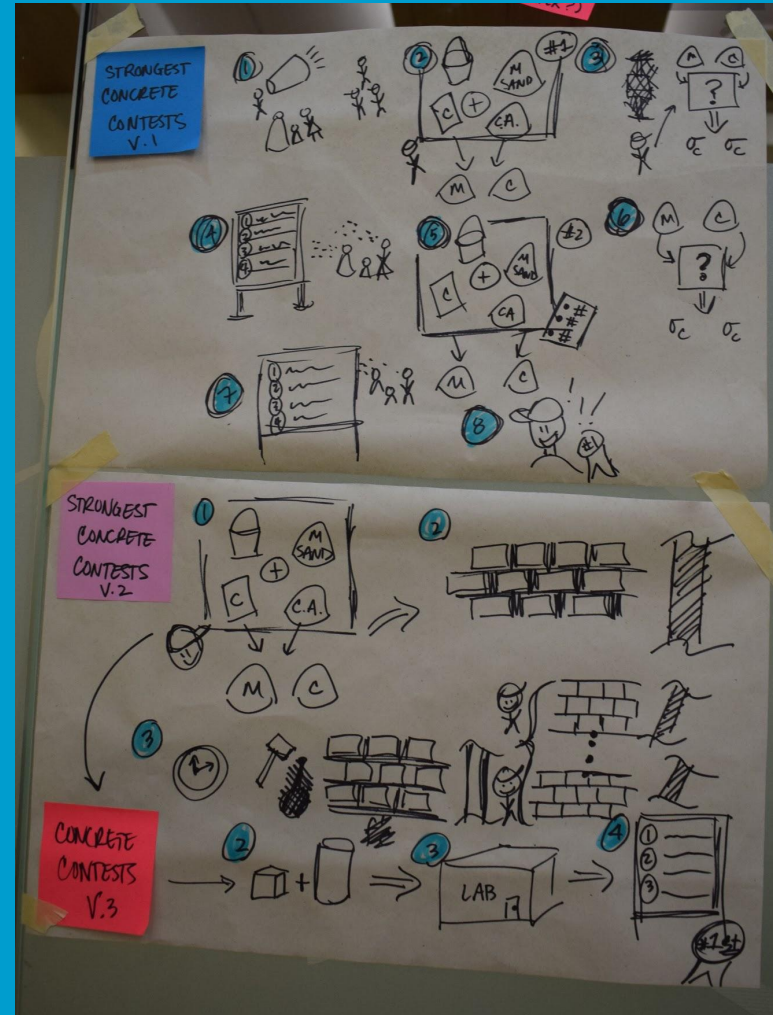| SCORECARD I			
Determinant	**Definition**	**Analysis**	**Key to BC**
1. Perceived Self-Efficacy	Belief that he or she can do the behavior given his or her current knowledge and skills		
2. Perceived social norms	Who are the important people for the target group and who approves? Who disapproves?		
3. Perceived Positive Consequences	The advantages he or she sees in performing a Behavior		
4. Perceived Negative Consequences	The negative things he or she see in performing the behavior		
5. Access	How available is the products/services required to adopt the behavior: Can I find, afford, and apply the product myself?		
6. Reminders	Will I remember to do and how to do the behavior?		
7. Perceived Risk	How likely is ignoring the behavior going to impact him or her: Will anything happen to me or my family if I ignore the problem?		
8. Perceived Severity	Belief that the problem (which the behavior can prevent) is serious		
9, Perceived Action Efficacy	Belief that by practicing the behavior he or she will avoid the problem		
10. Perception of Divine Will	Belief that it is God's will		
11. Policy	Laws and regulations that affect behaviors and access to products/services		
12. Culture	cultural taboos; history, customs, lifestyles, values and practices that keep people from adopting the behavior		

W H Y Template: Scorecard II

SCORE   **/ 12**

Example

problem: **unsafe and poor quality homes**
potential behavior: **households adopt light construction materials**

	SCORECARD I		
Determinant	**Definition**	**Example Analysis**	**Key to BC**
1. Perceived Self-Efficacy	Belief that he or she can do the behavior given his or her current knowledge and skills	1. Can't buy the material in bulk 2. Not easily accessible for purchase 3. Mason doesn't know how to use it properly	√
2. Perceived social norms	Who are the important people for the target group and who approves? Who disapproves?	Disapproves: Masons, Neighbors, Family & Friends	√
3. Perceived Positive Consequences	The advantages he or she sees in performing a Behavior	I don't see the benefits	
4. Perceived Negative Consequences	The negative things he or she see in performing the behavior	Easier to break into home than bricks	√
5. Access	How available is the products/services required to adopt the behavior: Can I find, afford, and apply the product myself?	I've never encounter this product. Therefore it must be costly,.	√
6. Reminders	Will they remember to do and how to do the behavior?	Seeing my neighbors/mason is a reminder	√
7. Perceived Risk	How likely is ignoring the behavior going to impact him or her: Will anything happen to me or my family if I ignore the problem?	Likelihood that my home collapses in the next disaster: very unlikely	
8. Perceived Severity	Belief that the problem (which the behavior can prevent) is serious	How serious will the damage to my home be: Not very serious (from past experience)	
9, Perceived Action Efficacy	Belief that by practicing the behavior he or she will avoid the problem	How effective will light construction materials be in keeping me safe: Unsure	
10. Perception of Divine Will	Belief that it is God's will	Acting or adopting the behavior will not have change the outcome	√
11. Policy	Laws and regulations that affect behaviors and access to products/services	Laws and regulations are not enforced. why should I change how I currently build?	
12. Culture	cultural taboos; history, customs, lifestyles, values and practices that keep people from adopting the behavior	Bricks are strong and can withstand anything	√

W H Y   Example: Scorecard II

SCORE | **7 / 12**

This core design sprint exercise challenges participants to sketch eight distinct ideas in eight minutes. The objective is to think past your first idea which tends to be the least innovative. The goal is to generate a wide variety of solutions.

STEPS:

1. Take your paper and fold it into eight sections
2. Set the timer for eight minutes
3. Each team member sketches one idea in each of the eight spaces
4. When the timer goes off, stop sketching
5. Each team member shares
6. Combine or narrow ideas and then elaborate on those ideas
7. Repeat as necessary

H O W   Example: Crazy Eights

STEP 2

Market-based intervention designed to produce behavior change
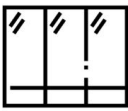
Persona: Mauricio (Household)	
Idea #2: a physical engagement system	
Target Behavior	● advocating for light construction materials (LCM) ● actively engaging with Masons
Assumptions	● more active stance ● negotiating power with masons + confidence
Hypothesis	● pick LCM for construction ● negotiate with masons to adopt LCM
Design Requirements	● financial incentives are important ● can help him understand how this can save % + time

STEP 1 & 3

Behavior change pre and post test to capture baseline and determine where if any change has occurred

Persona: Vijay (Mason)

1. Please identify the top three words that you associate with river and M-sand.

DURABLE	WEAK	COSTLY	AVAILABLE
CRACKS	SMOOTH FINISH	ASPIRATIONAL	ENVIRONMENTALLY FRIENDLY

2. On a scale from 1-5 how confident are you in using M-Sand on your next project?

3. On a scale from 1-5 how likely would you be to recommend M-sand to your customer?

1	2	3	4	5
Not Confident		Neutral		Very Confident

H O W   Example: Prototyping