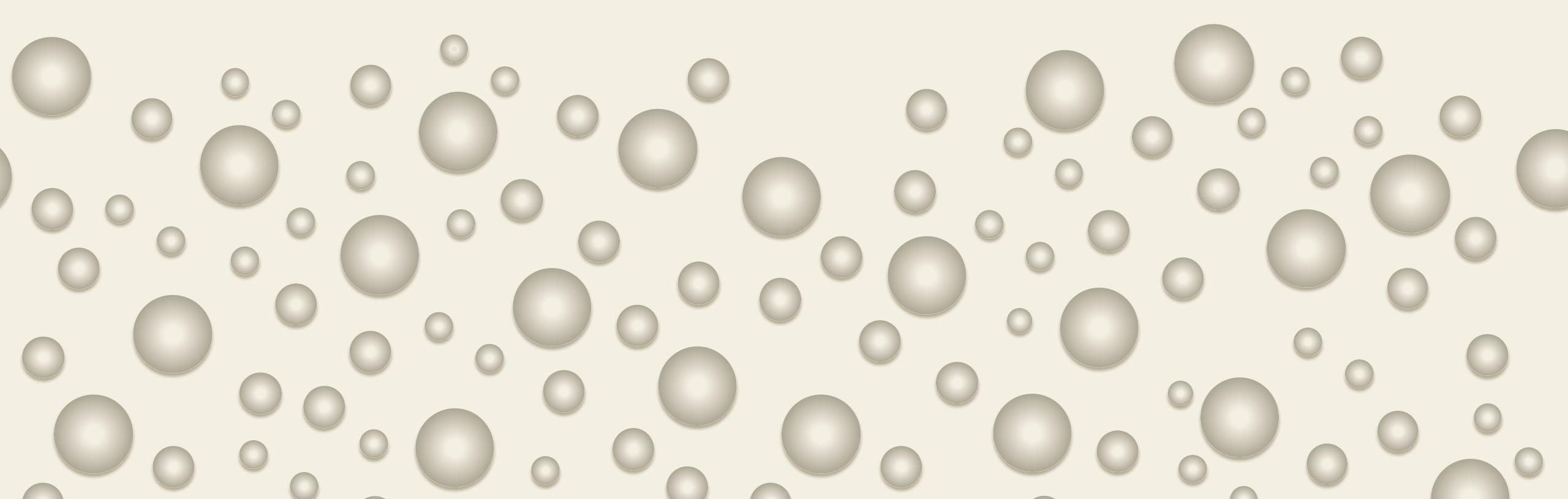




There was this child Nema, a young girl who was separated from her family during an attack in South Sudan. When we spoke to her in the registration center of the camp, she only held onto two memories: her blue school uniform and a beach that was next to it. Aid workers used these details to search for her family, eventually reuniting Nana with her mother in another camp. I still think about that often. Those two details were enough to find her mother.

There are approximately 103.7 million people worldwide currently forcibly displaced due to conflicts, violence, fear of persecution, and human rights violations



Statistics from United Nations
High Commissioner for
Refugees (UNHCR) that
categorize the age
demographic divisions



Ongoing Conflicts Fueling Historic Displacement and Family Separation



She belongs to one of these countries that are currently going through similar situations







We don't know when the rebels or the government will attack. It suddenly happened - there was a lot of chaos when our village was suddenly attacked. I got separated when my village was attacked while I was in school. There were gunshots, everyone around me started to run; I followed, not knowing where my family was. I looked for my parents, but they weren't at home, so in desperation, I ran to find safety. I was hiding under a truck when I realized I was among strangers, all of us fleeing towards an uncertain safety. We traveled for days, with minimal food and water, trying to reach the Uganda border. My relatives were shot in front of me while we were close to the Uganda border. Crossing into Uganda, I kept hoping I'd find my family at one of the refugee camps. At the camp, I went from one shelter to another, looking for any familiar faces. I was with strangers while coming to Uganda for safety. In the camp, aid workers helped me write down my story, hoping to find any leads on my family's whereabouts. I described the tree near our house and the school I attended, hoping someone would recognize them. I still wear the bracelet my mother gave me. I wanted to find them in the refugee camp, but I didn't know how. I still think I will find them.

#### 1. UNCERTAINTY

"We don't know when the rebels or the government will attack." "There was a lot of chaos when our village was suddenly attacked." "I was hiding under a truck when I realized I was among strangers, all of us fleeing towards an uncertain safety."

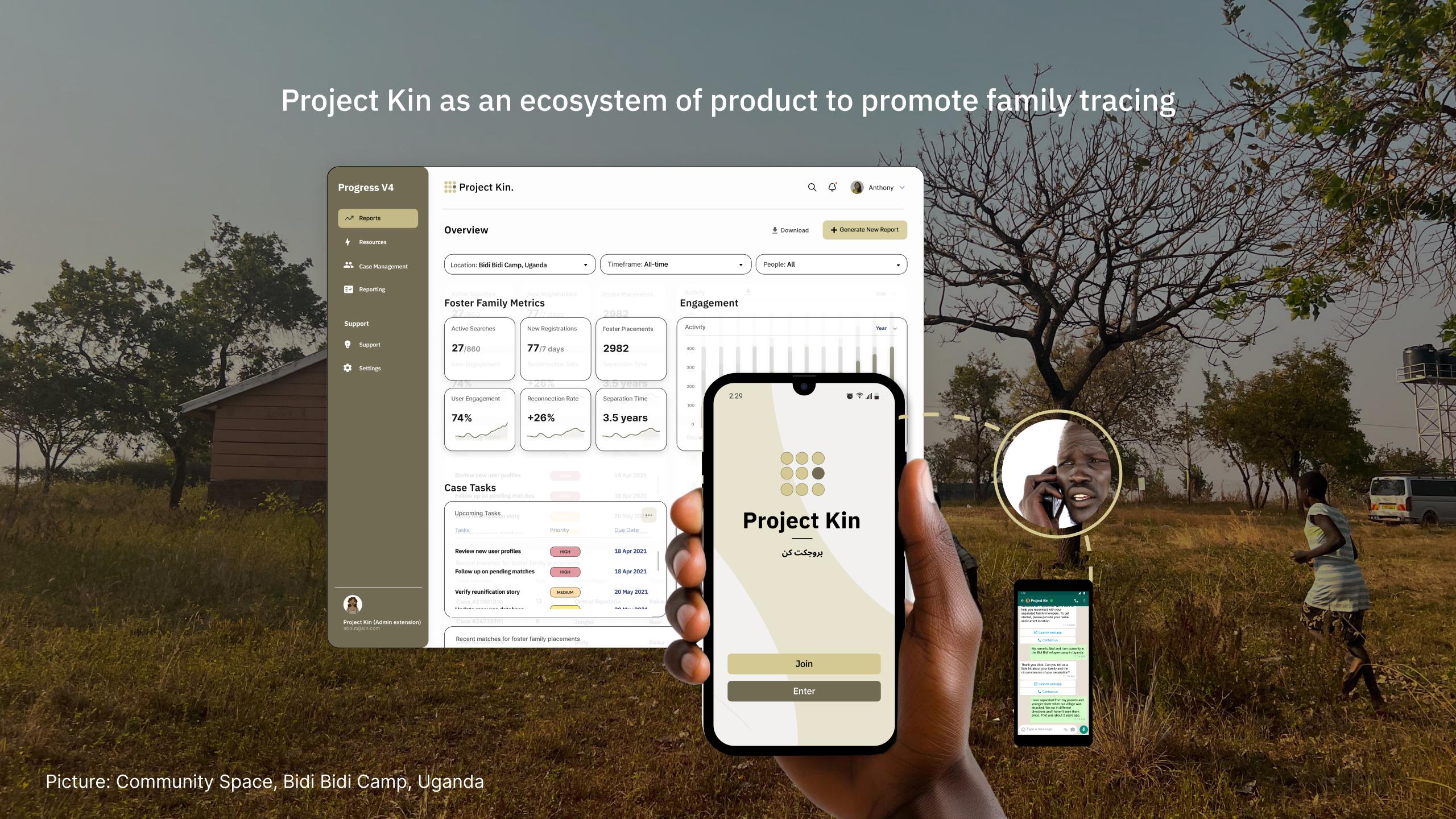
1. UNCERTAINTY	•	"We don't know when the rebels or the government will attack." "There was a lot of chaos when our village was suddenly attacked." "I was hiding under a truck when I realized I was among strangers, all of us fleeing towards an uncertain safety."
2. CHAOS AND DISRUPTION	•	"I got separated when my village was attacked while I was in school." "There were gunshots, everyone around me started to run; I followed, not knowing where my family was." "I looked for my parents, but they weren't at home, so in desperation, I ran to find safety."



1. UNCERTAINTY	"We don't know when the rebels or the government will attack." "There was a lot of chaos when our village was suddenly attacked." "I was hiding under a truck when I realized I was among strangers, all of us fleeing towards an uncertain safety.
2. CHAOS AND DISRUPTION	"I got separated when my village was attacked while I was in school." "There were gunshots, everyone around me started to run; I followed, not knowing where my family was." "I looked for my parents, but they weren't at home, so in desperation, I ran to find safety."
3. SURVIVAL	"We traveled for days, with minimal food and water, trying to reach the Uganda border."  "My relatives were shot in front of me while we were close to the Uganda border."  "I was with strangers while coming to Uganda for safety."
4. LONGING AND SEARCHING	"Crossing into Uganda, I kept hoping I'd find my family at one of the refugee camps."  "At the camp, I went from one shelter to another, looking for any familiar faces."  "I wanted to find them in the refugee camp, but I didn't know how."

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↓ 5. CLINGING TO IDENTITY	"In the camp, aid workers helped me write down my story, hoping to find any leads on my family's whereabouts." "I described the tree near our house and the school I attended, hoping someone would recognize them." "I still wear the bracelet my mother gave me." "I still think I will find them."

How might we empower displaced individuals to reconnect with their separated family members, while **ensuring their safety**, **privacy, and cultural needs are met**?







#### Main Advisors (Harvard, MIT, South Sudan)



Martha Thompson, ex-OXFAM, MIT D-Lab, Humanitarian Innovation and Disaster Response Specialist



**Krzysztof Gajos,** Gordon McKay Professor of Computer Science at the Harvard.



**Shuya Gong**, Creative Director, IDEO CoLab Ventures, Harvard SEAS



Jon Jal Dak, YSAT Founder in Uganda & South Sudan, UNHCR Advisor for Displaced Individuals, OXFAM Advisor, Obama Fellow



**Kathleen Brandenburg,** Harvard Instructor, Co-Founder IA Collaborative



**Karen Reuther,** Harvard Instructor, Previously Creative Director at Reebok and Nike



























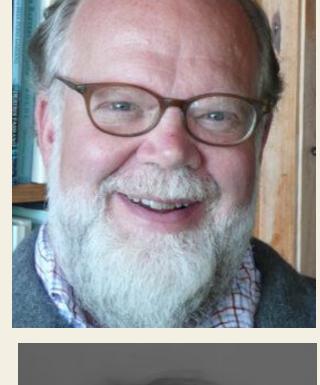
















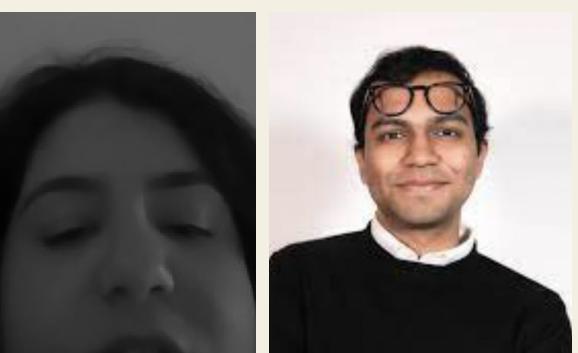








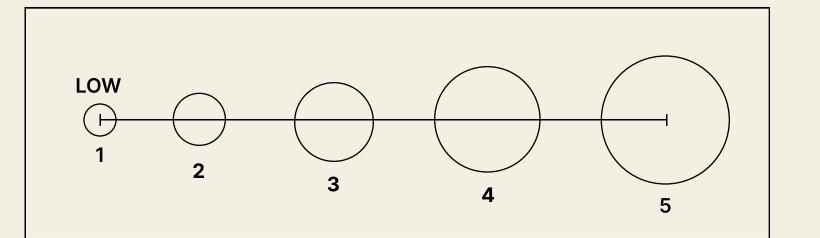




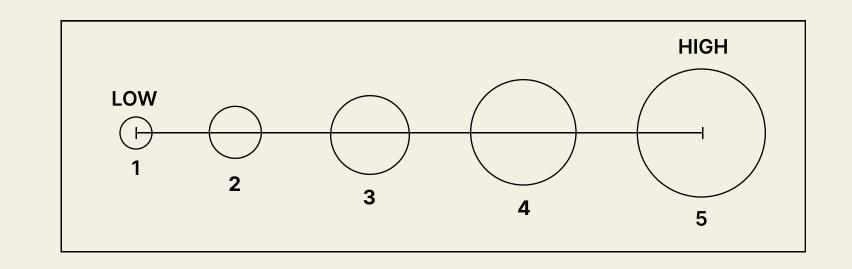


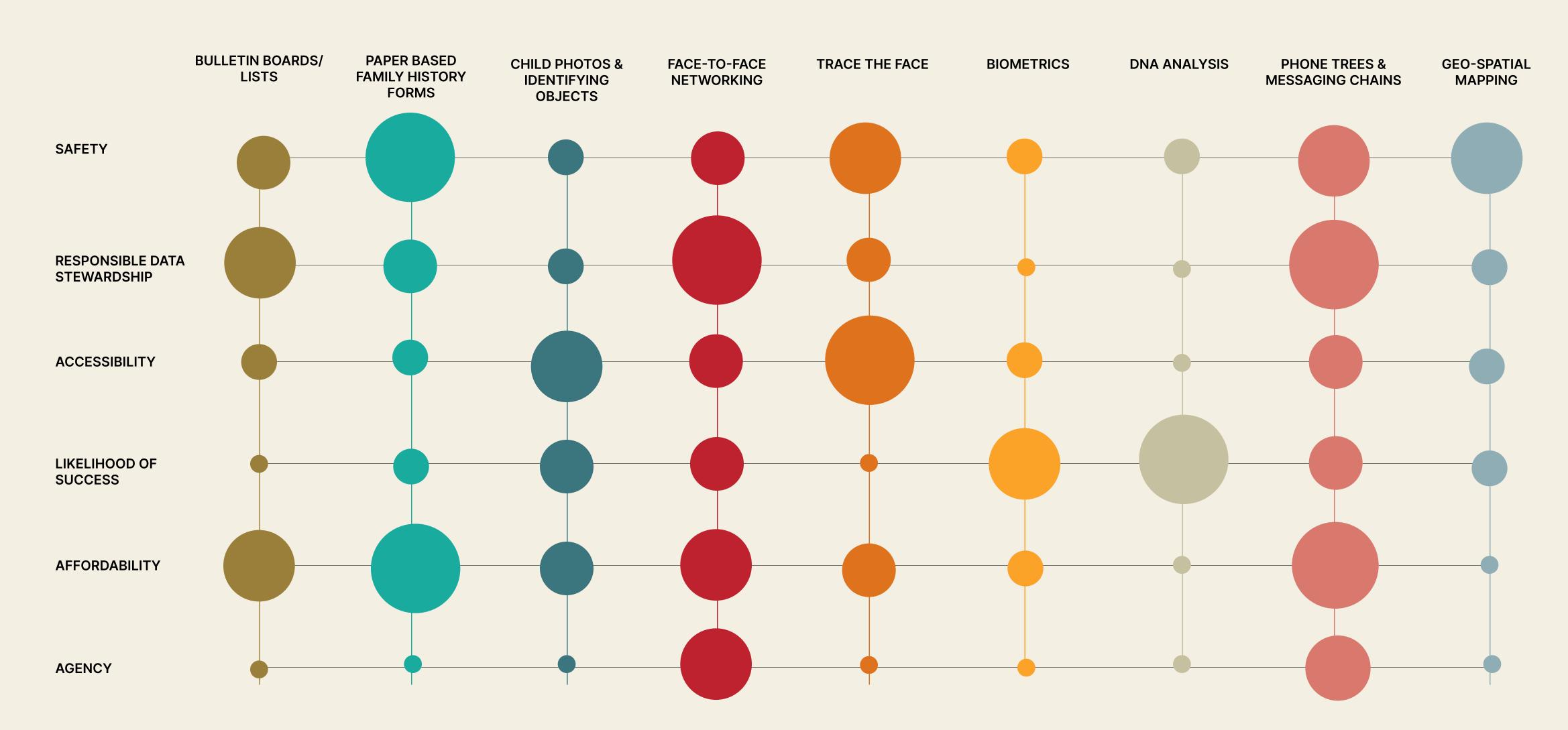
## **Analysis of existing methods**

- (1) SAFETY
- 2 RESPONSIBLE DATA STEWARDSHIP
- 3 ACCESSIBILITY
- (4) LIKELIHOOD OF SUCCESS
- 5 AFFORDABILITY
- 6 AGENCY

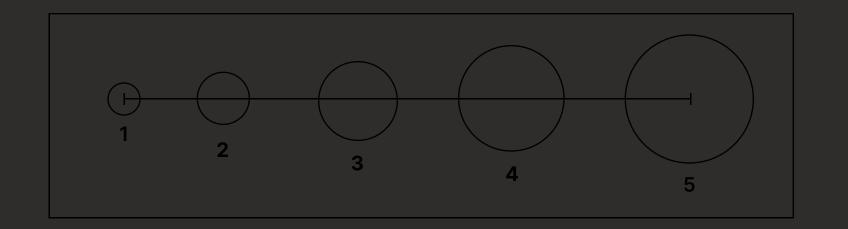


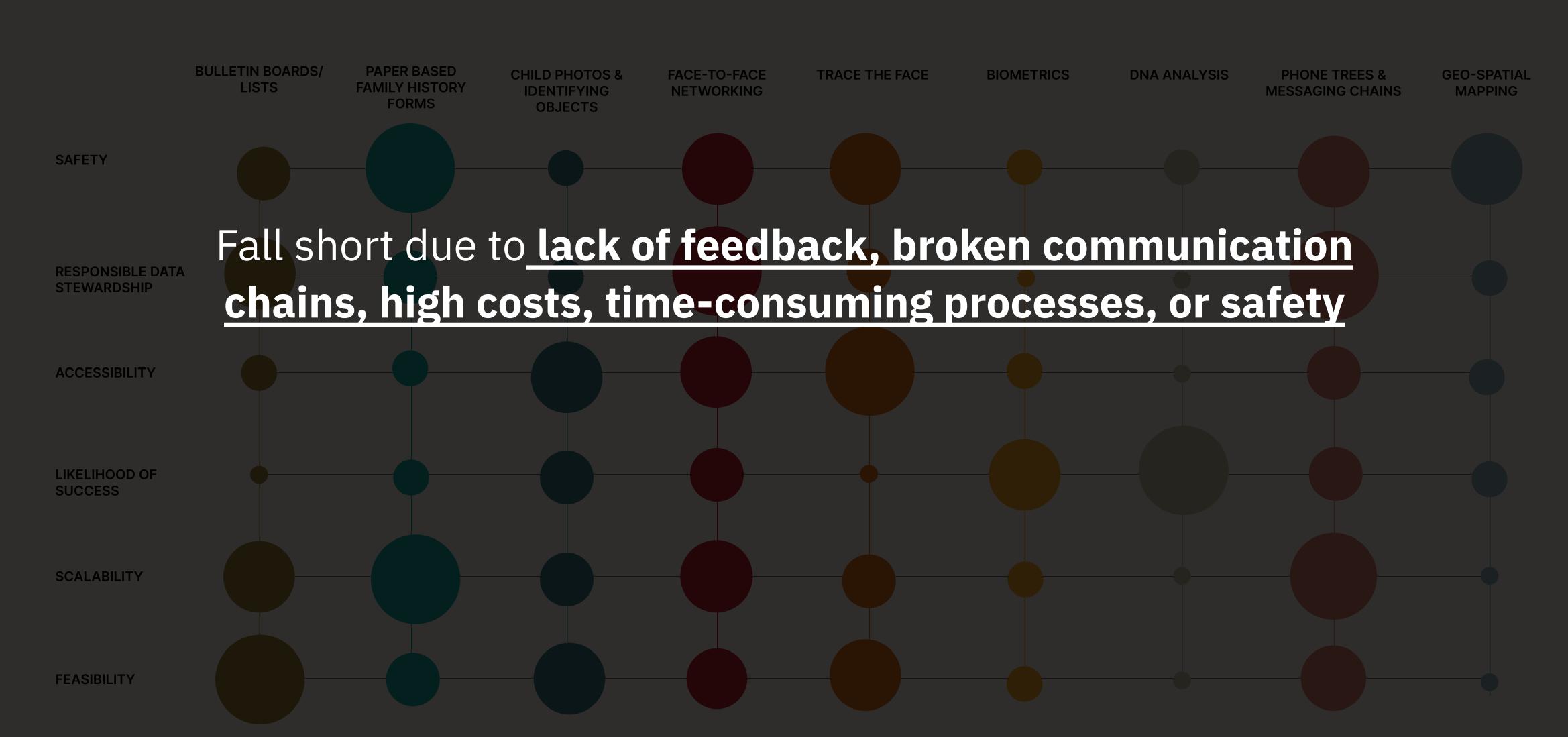
## **Analysis of existing methods**





### **Analysis of existing methods**

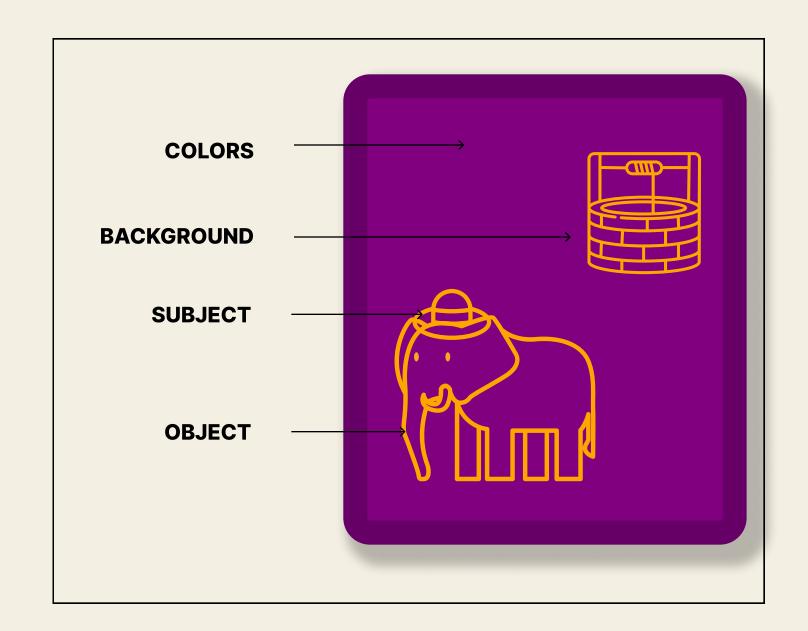




# Main Findings - Systems level

INTERVENTION			
CONTEXTUAL			
BASELINE	"Do no harm" principle	Design for redundancy	

#### **Initial Ideas**



**IDEA 1: FAMILY CREST** 

Custom visual crests uniquely representing family units through icon combinations self-designed as symbolic markers.



**IDEA 2: RFID PIN** 

Assign encrypted RFID tags to refugees that securely broadcast coded familial identity markers when scanned voluntarily at aid agency facilities.

# Main Findings - Systems level

INTERVENTION			
CONTEXTUAL			
BASELINE	"Do no harm" principle	Design for redundancy	Co-created with communites











Co-creation Workshops with people who have suffered family separation + foster families Women, Children, & Men from South Sudan (ages 18-80)





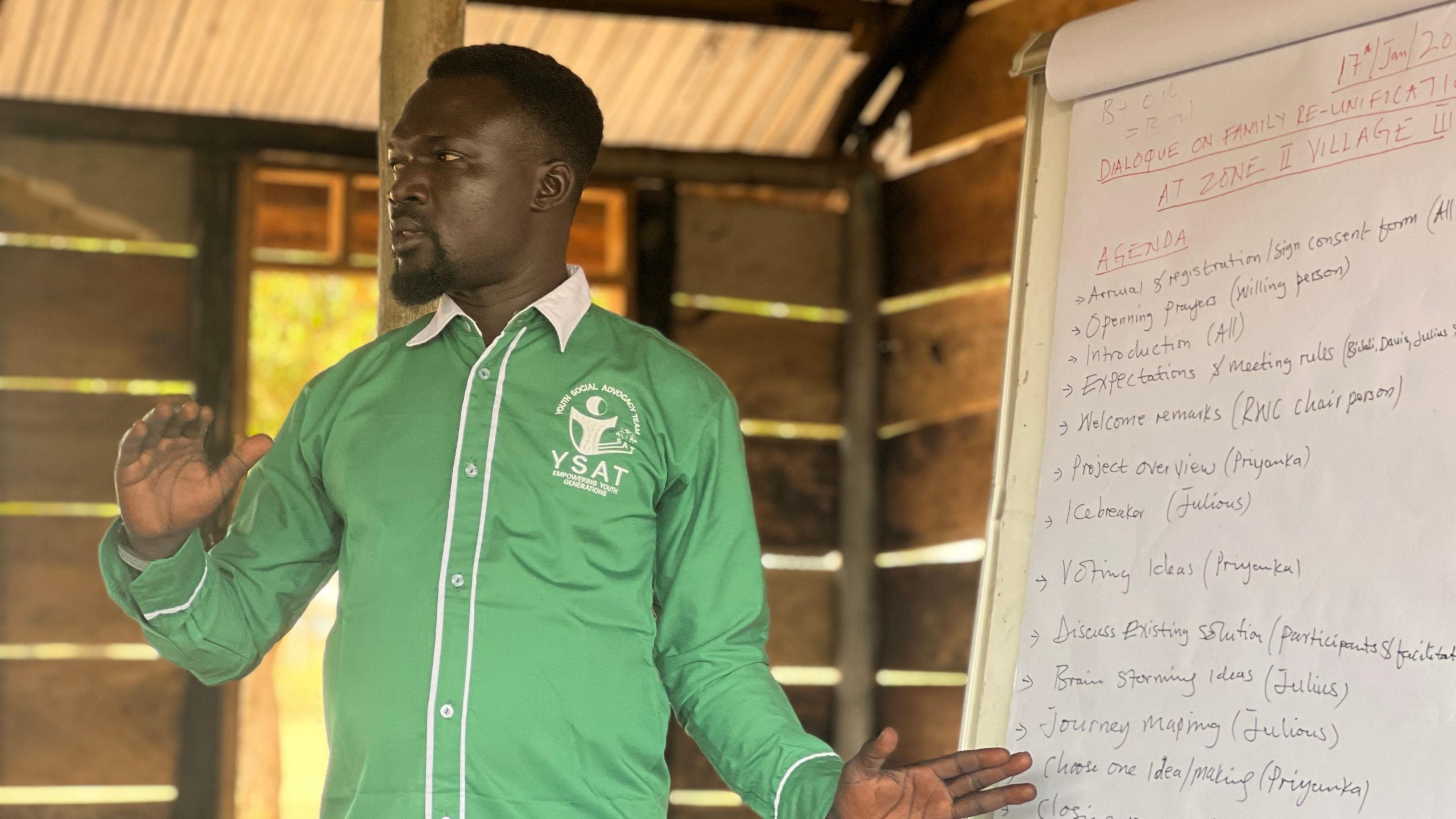
**Community Leadership Focus Groups (4)** 

Dialogues with Heads of Child Protection, Youth, Women, Disabilities, and Development



Meetings with NGOs/INGOs (6)

Meetings with On-Ground Organizations like I Can South Sudan, World Vision, UNHCR, Plan International, and Red Cross











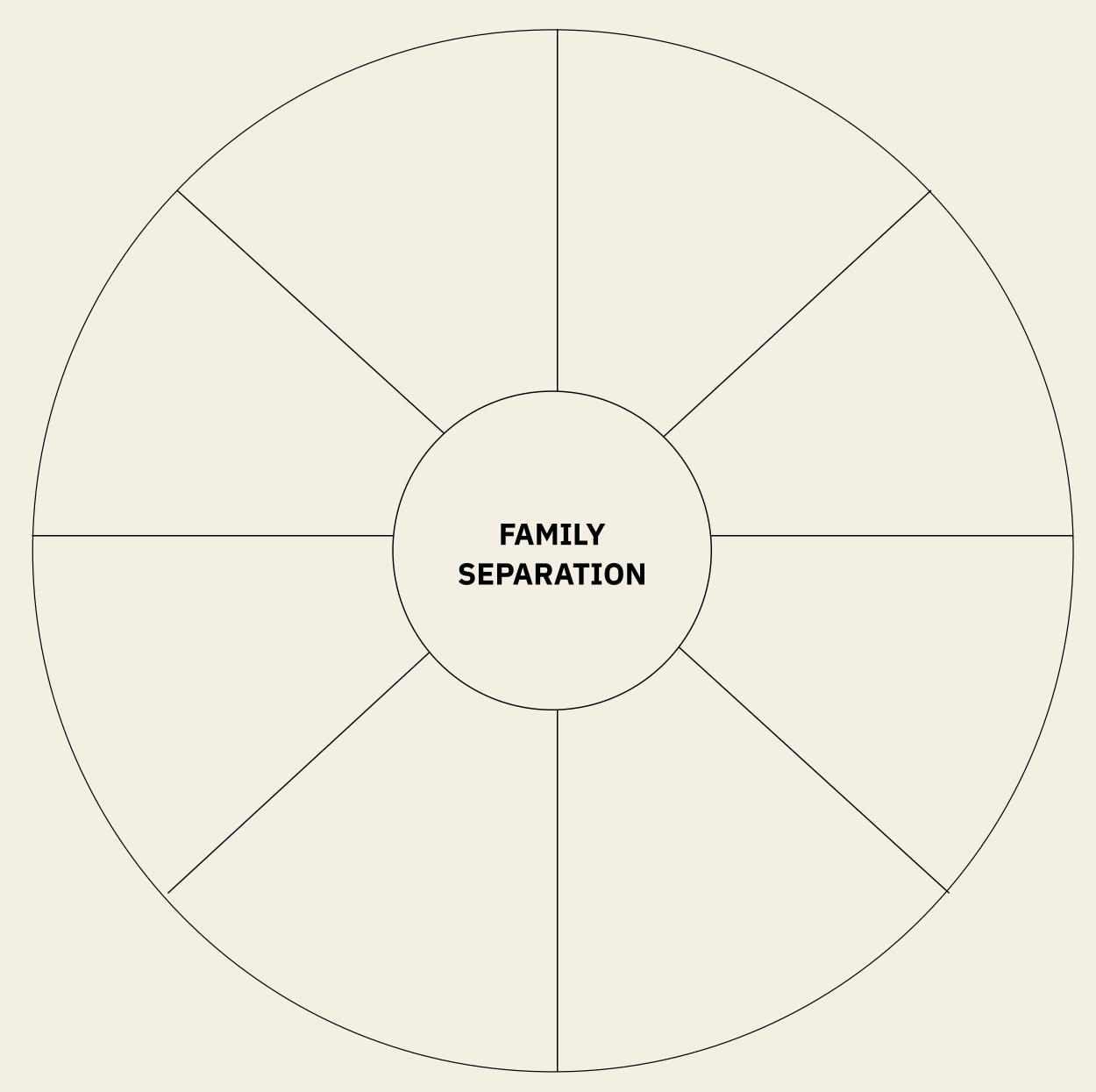




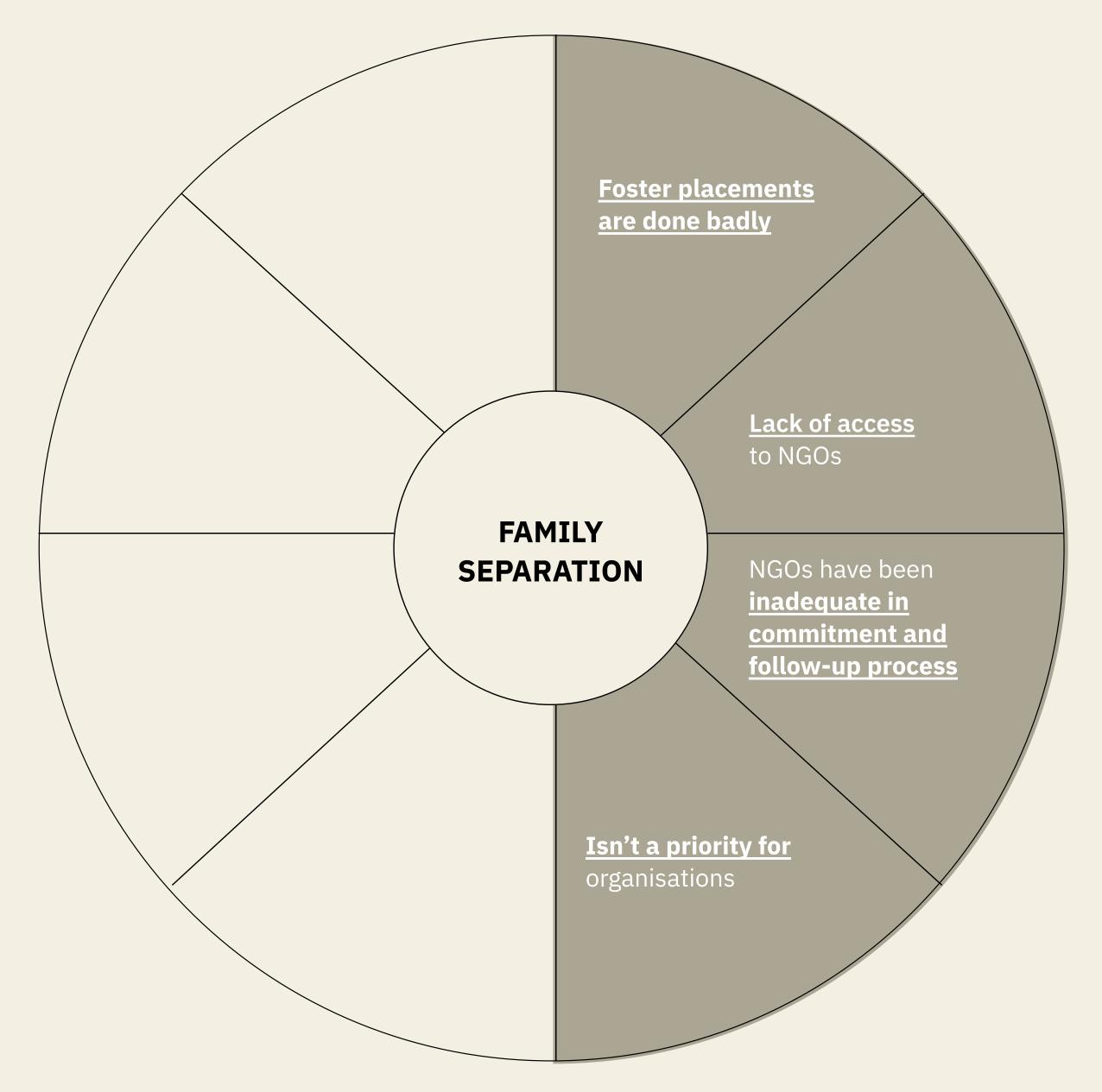




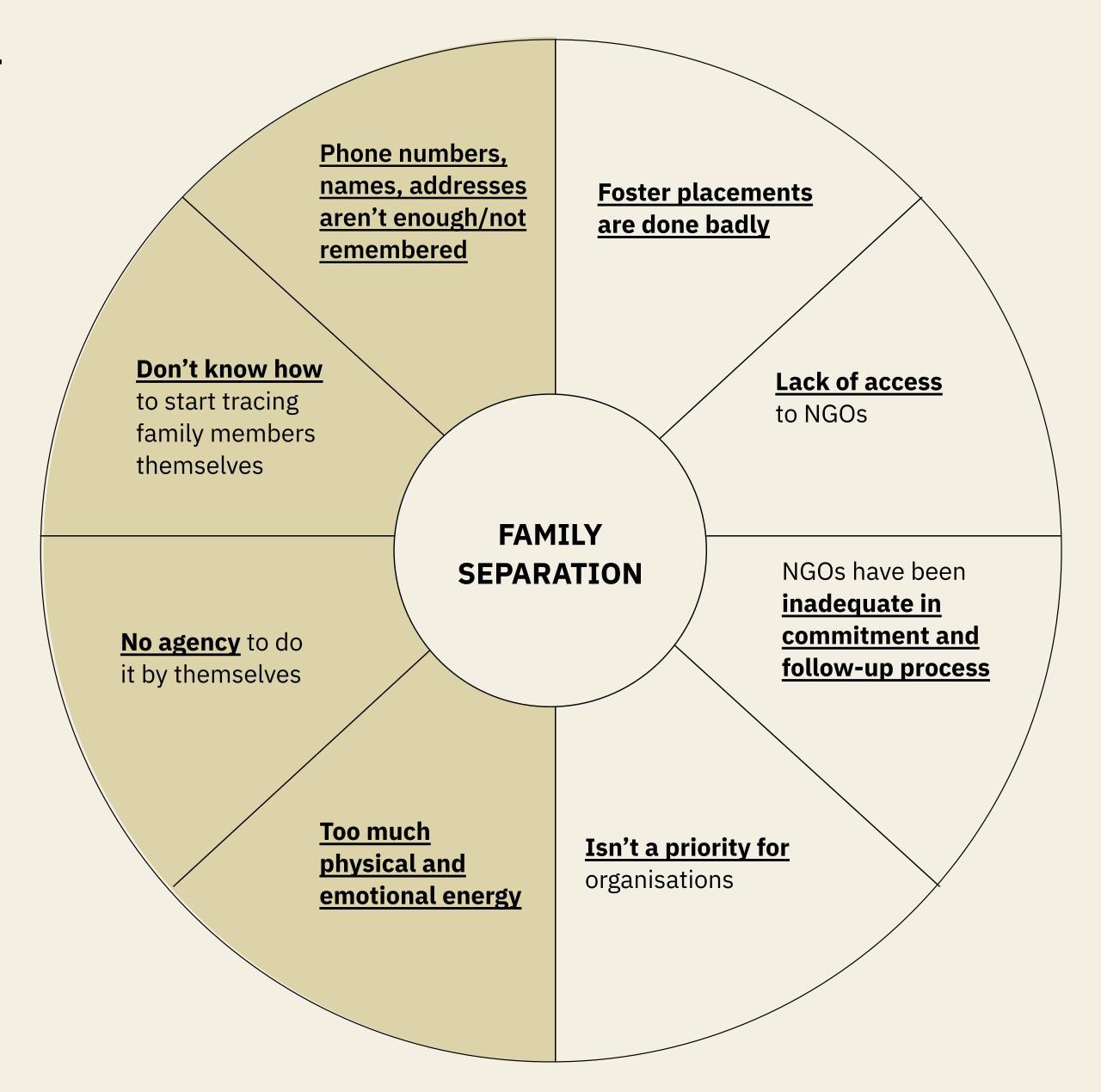
# Main Findings - User level



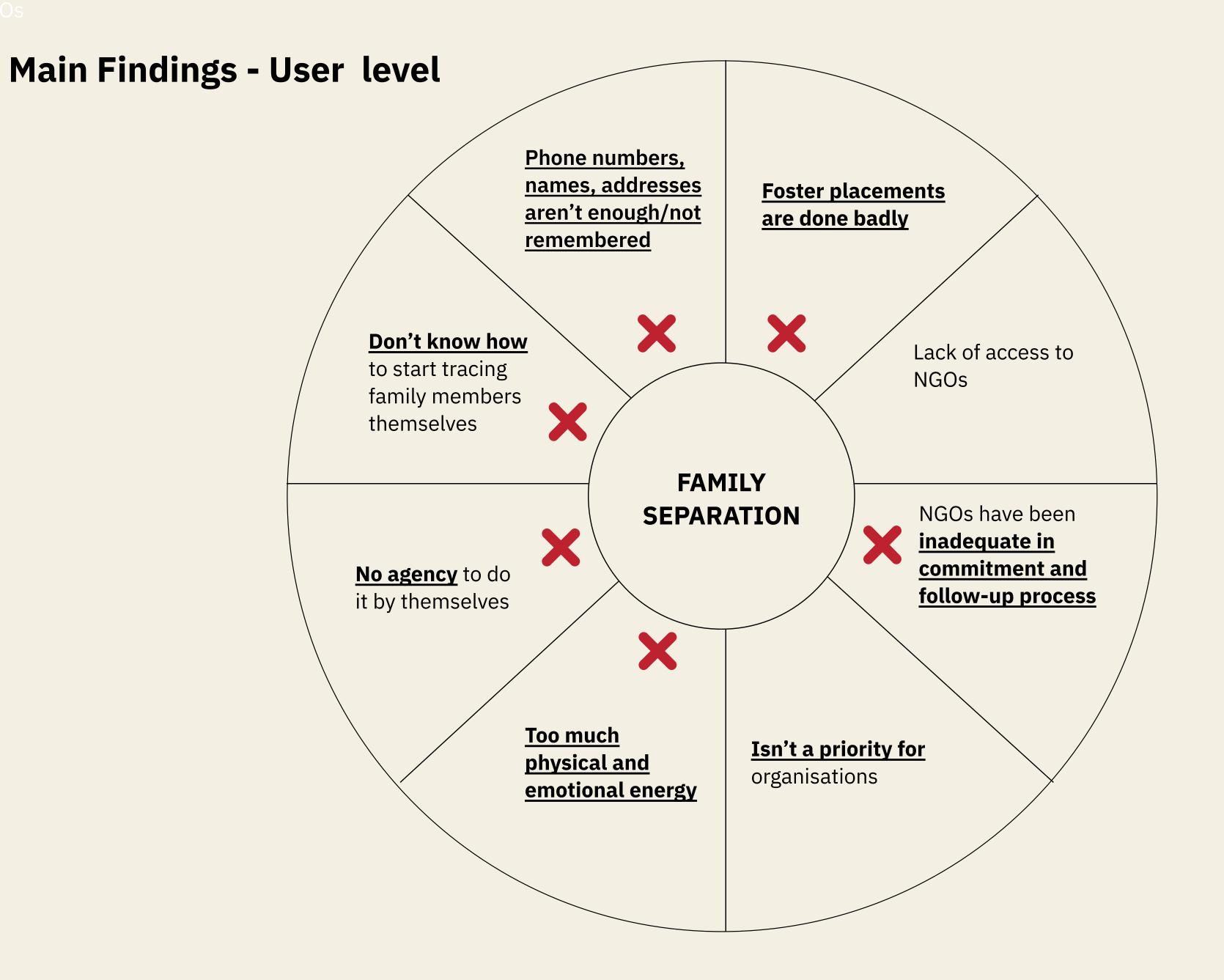
## Main Findings - User level



## Main Findings - User level

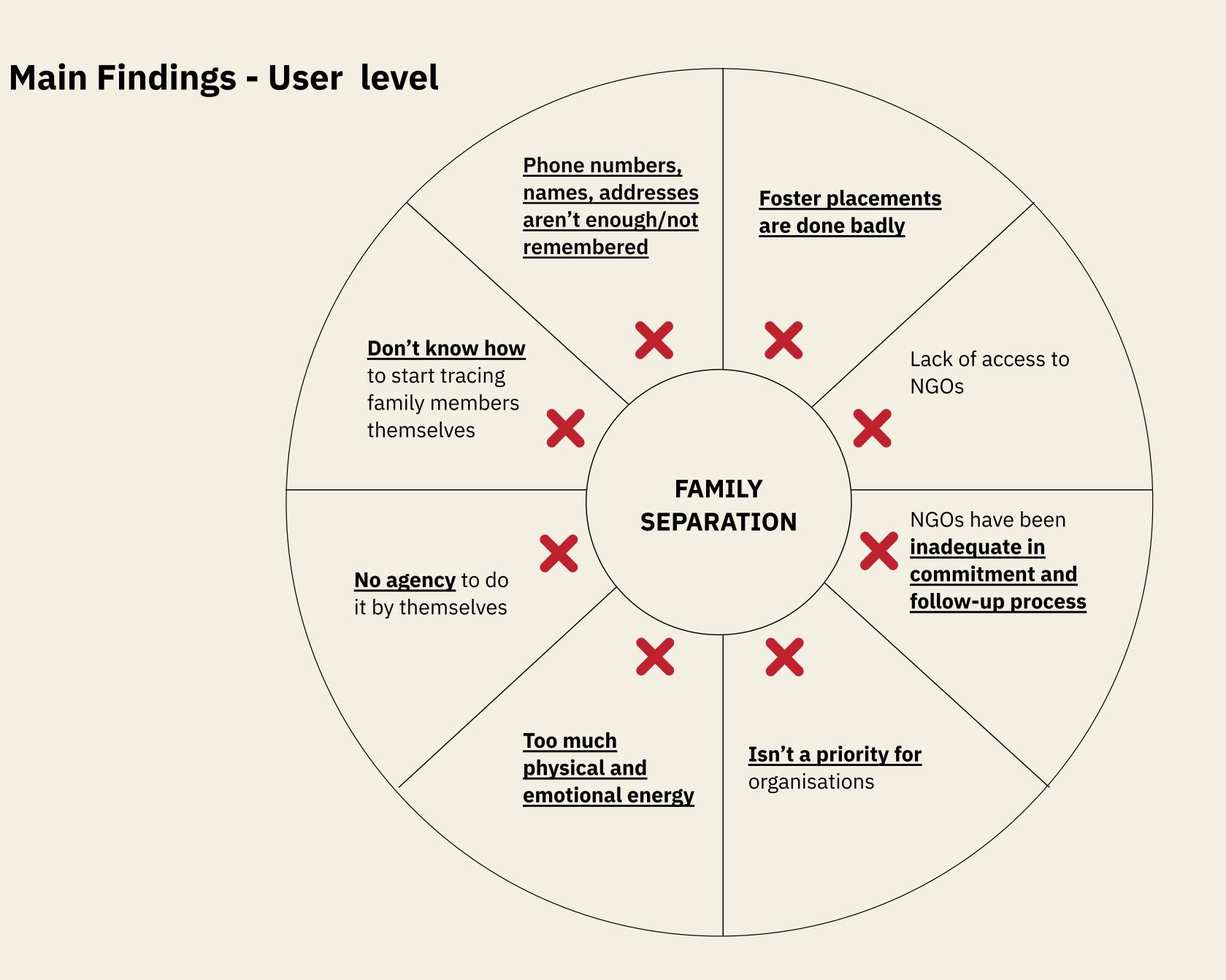


Lack of access to NGOs





**Crest - Failed** 





**RFID Pin - Failed** 







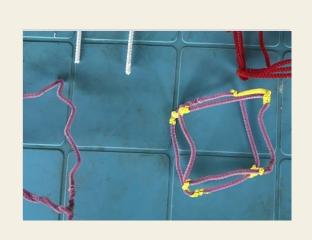


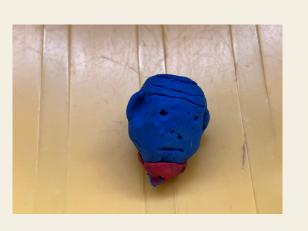






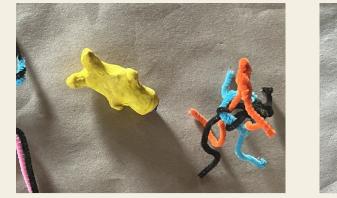












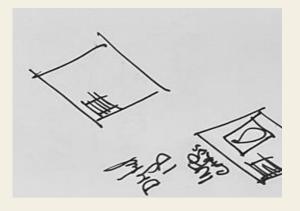




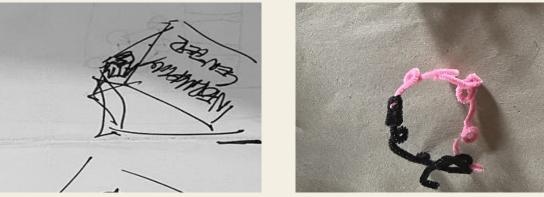


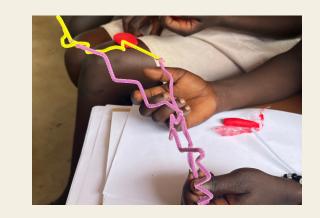






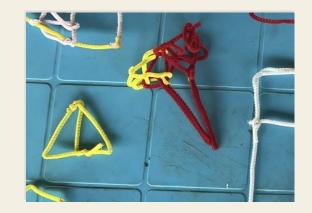




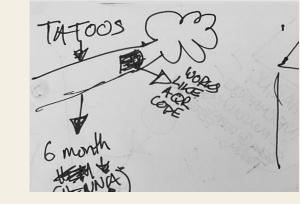


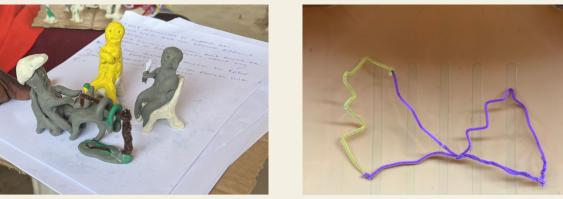




















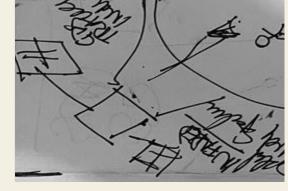


















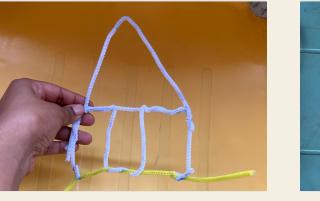




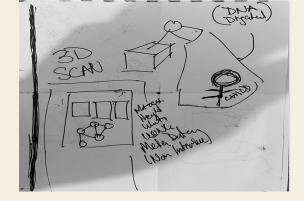


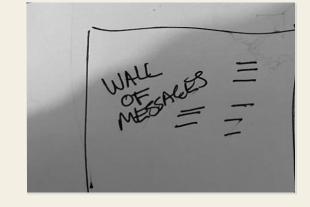










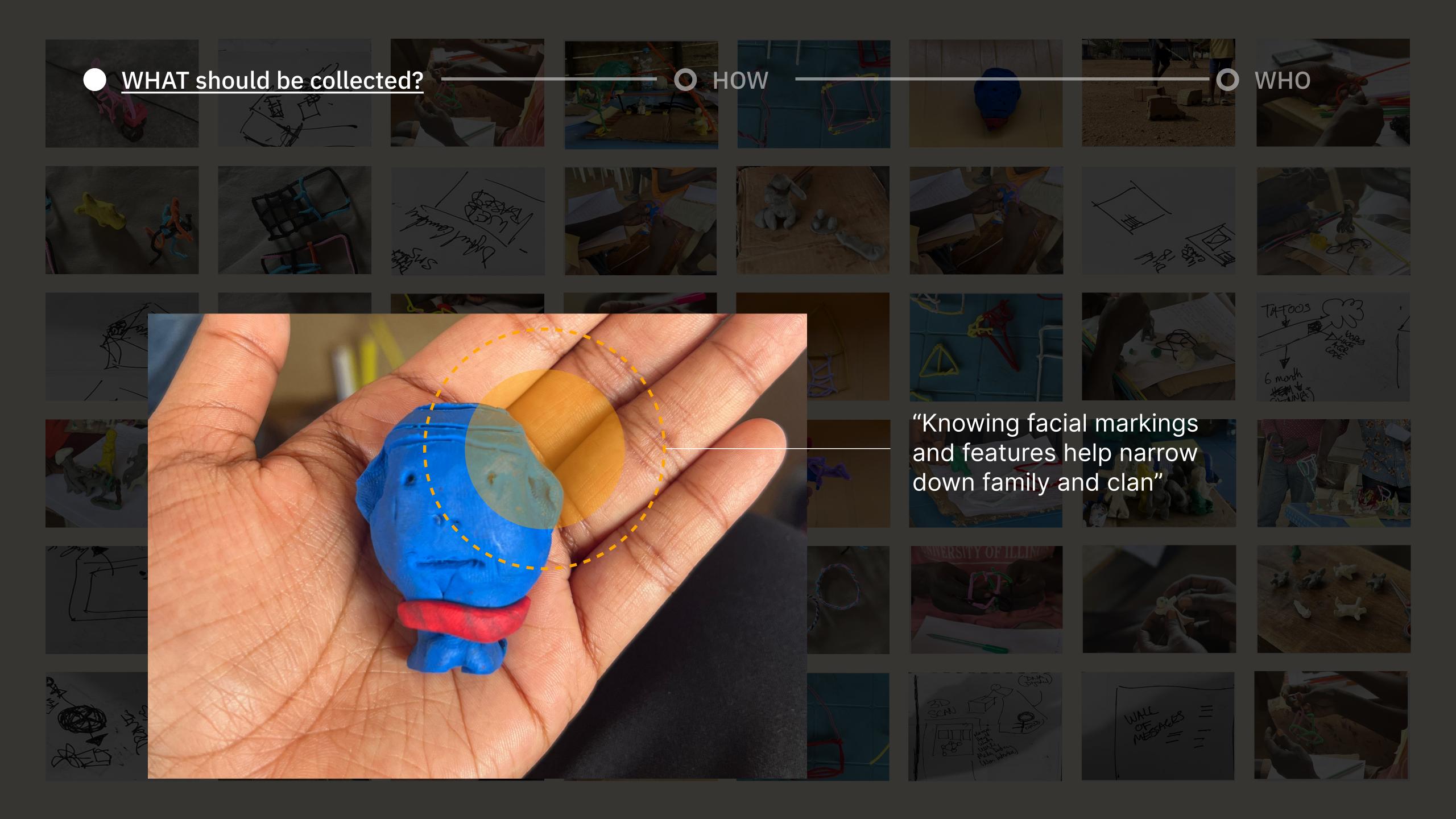


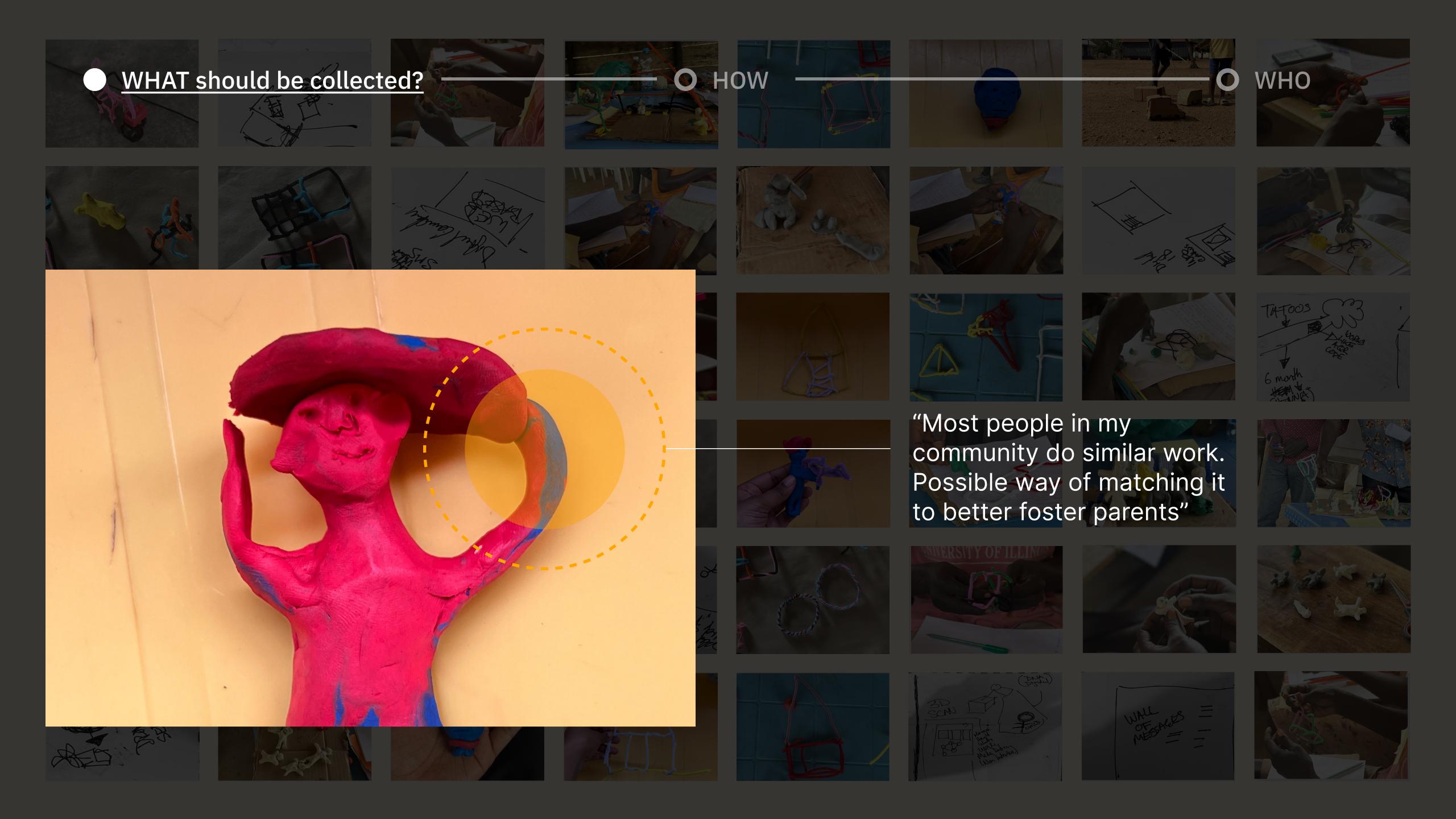


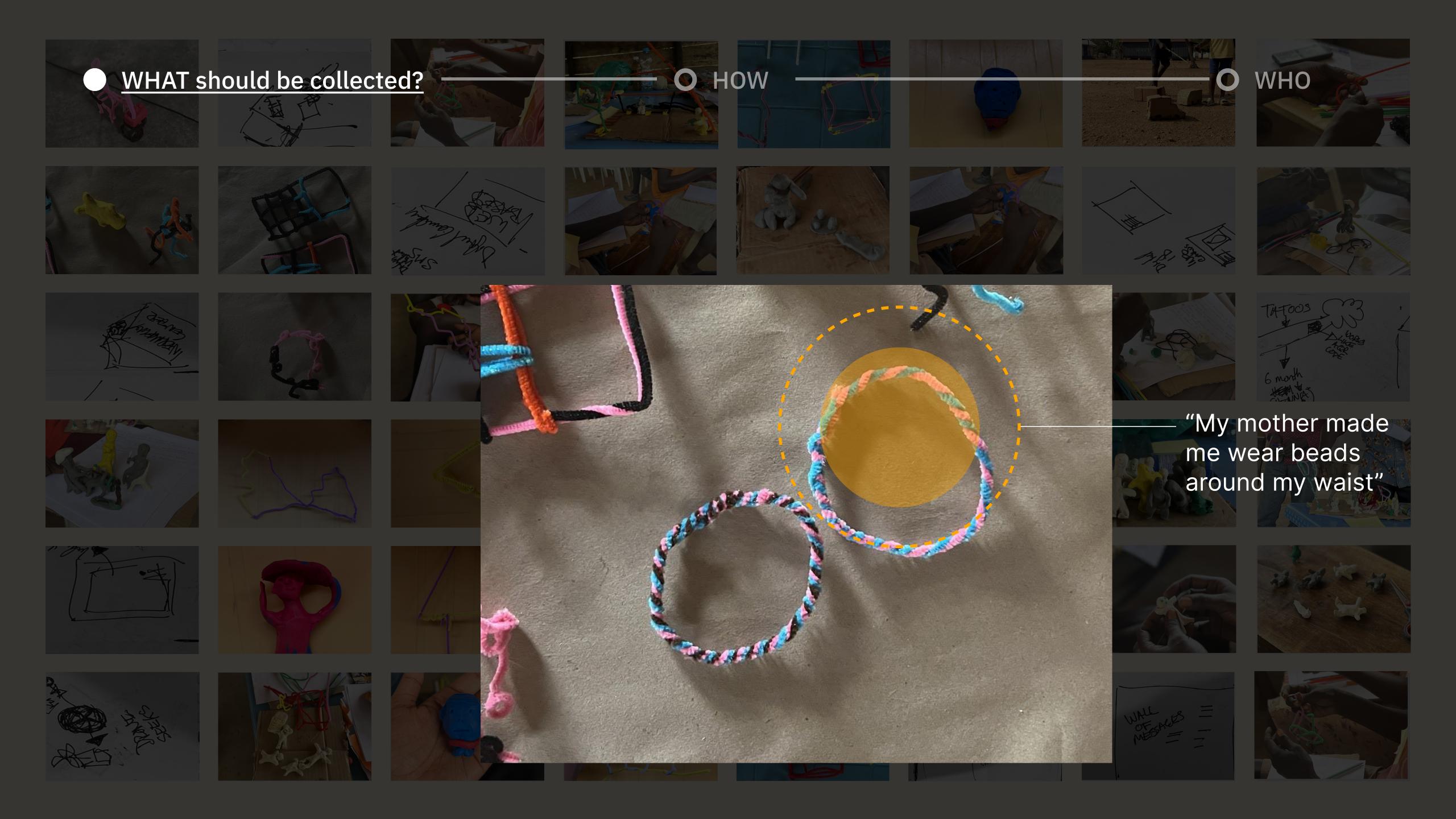


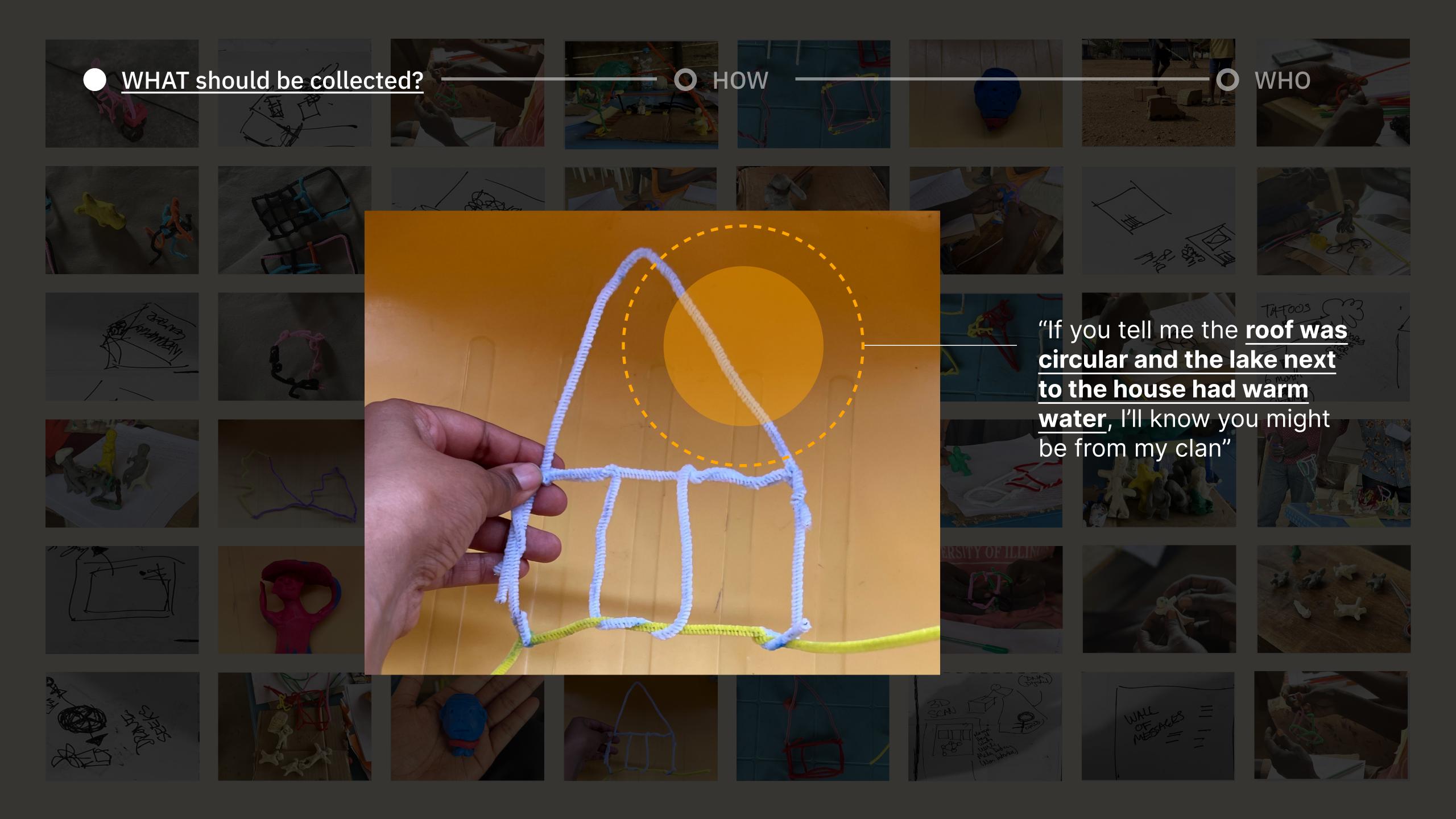


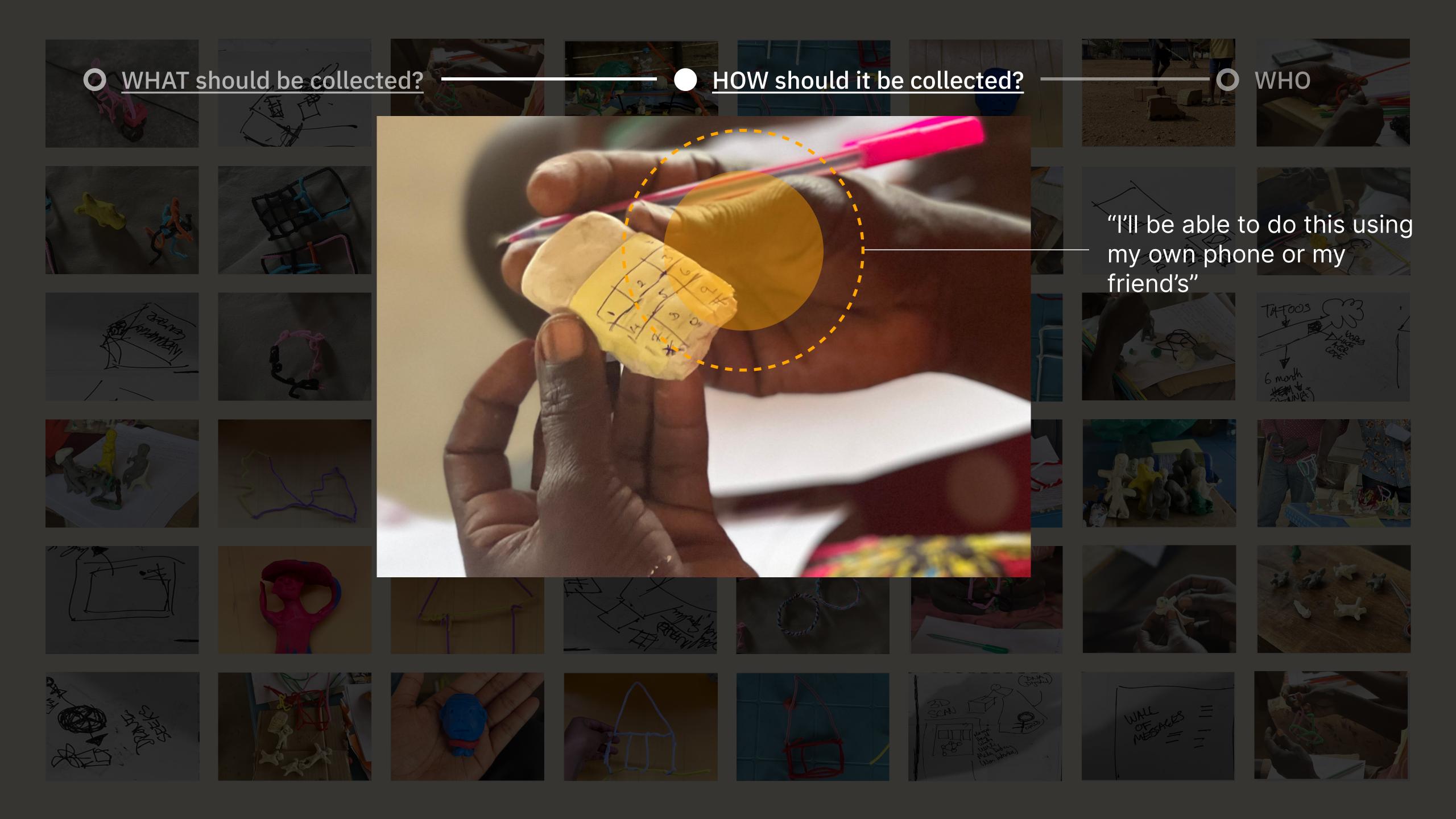


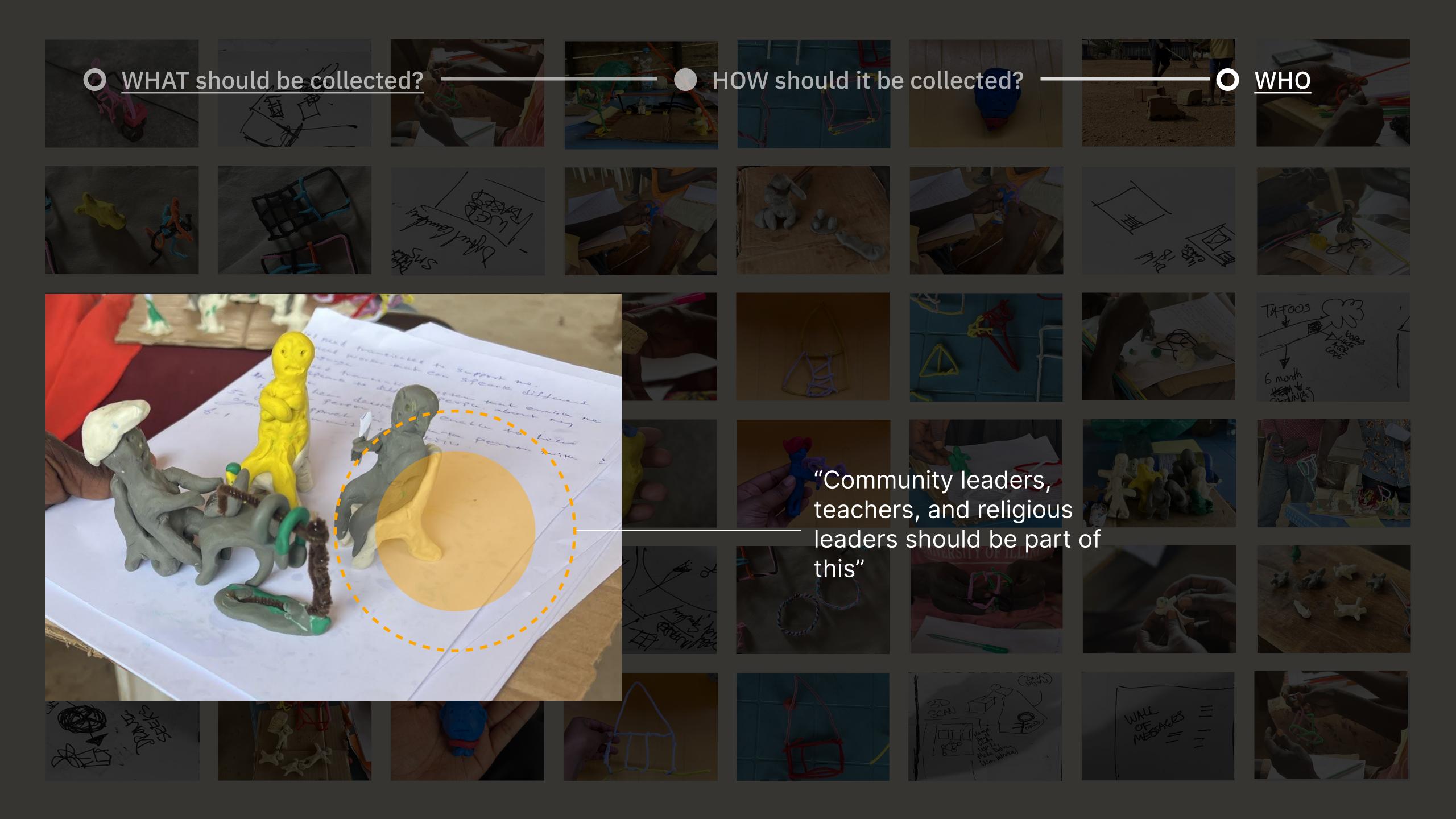


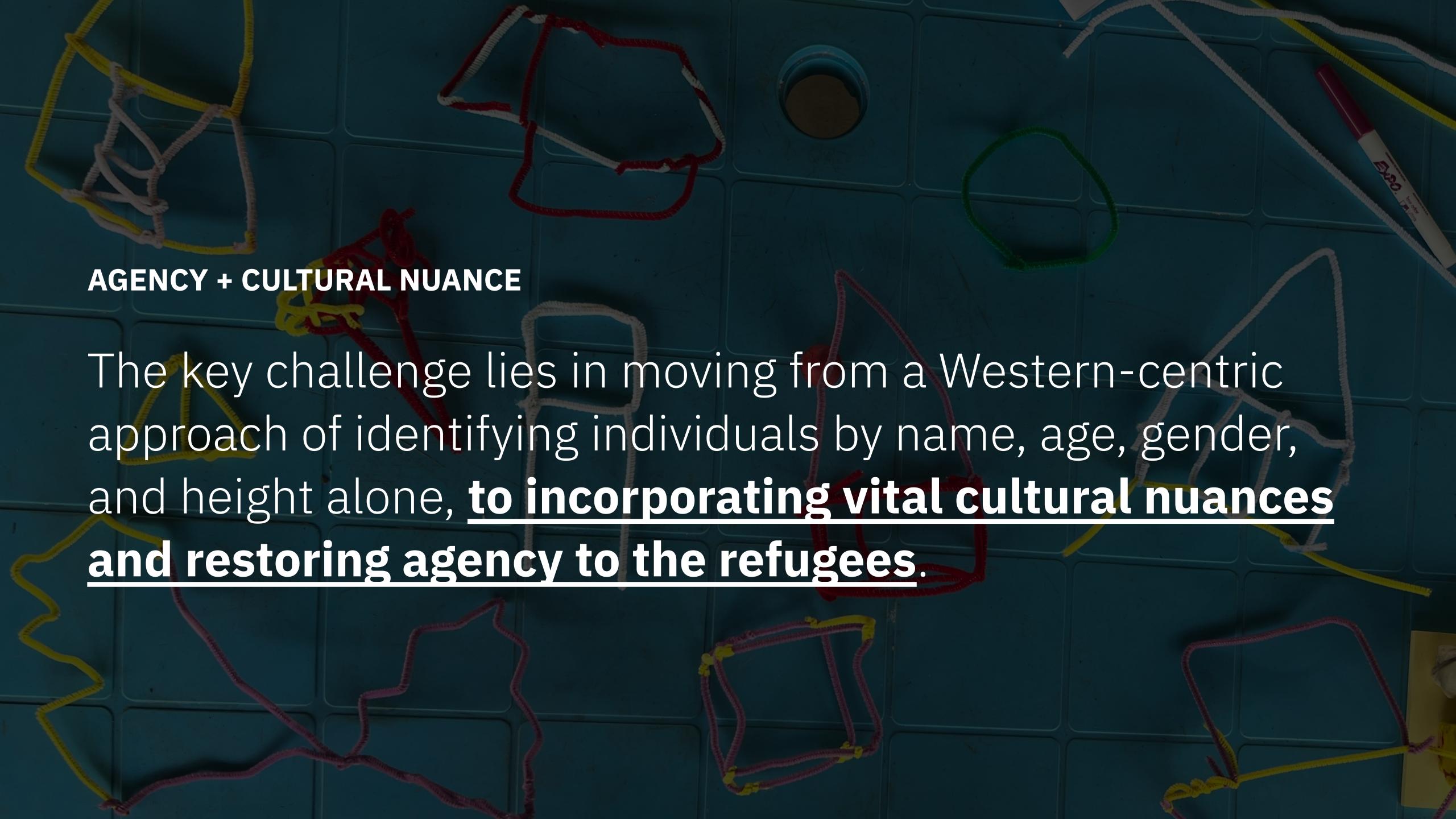








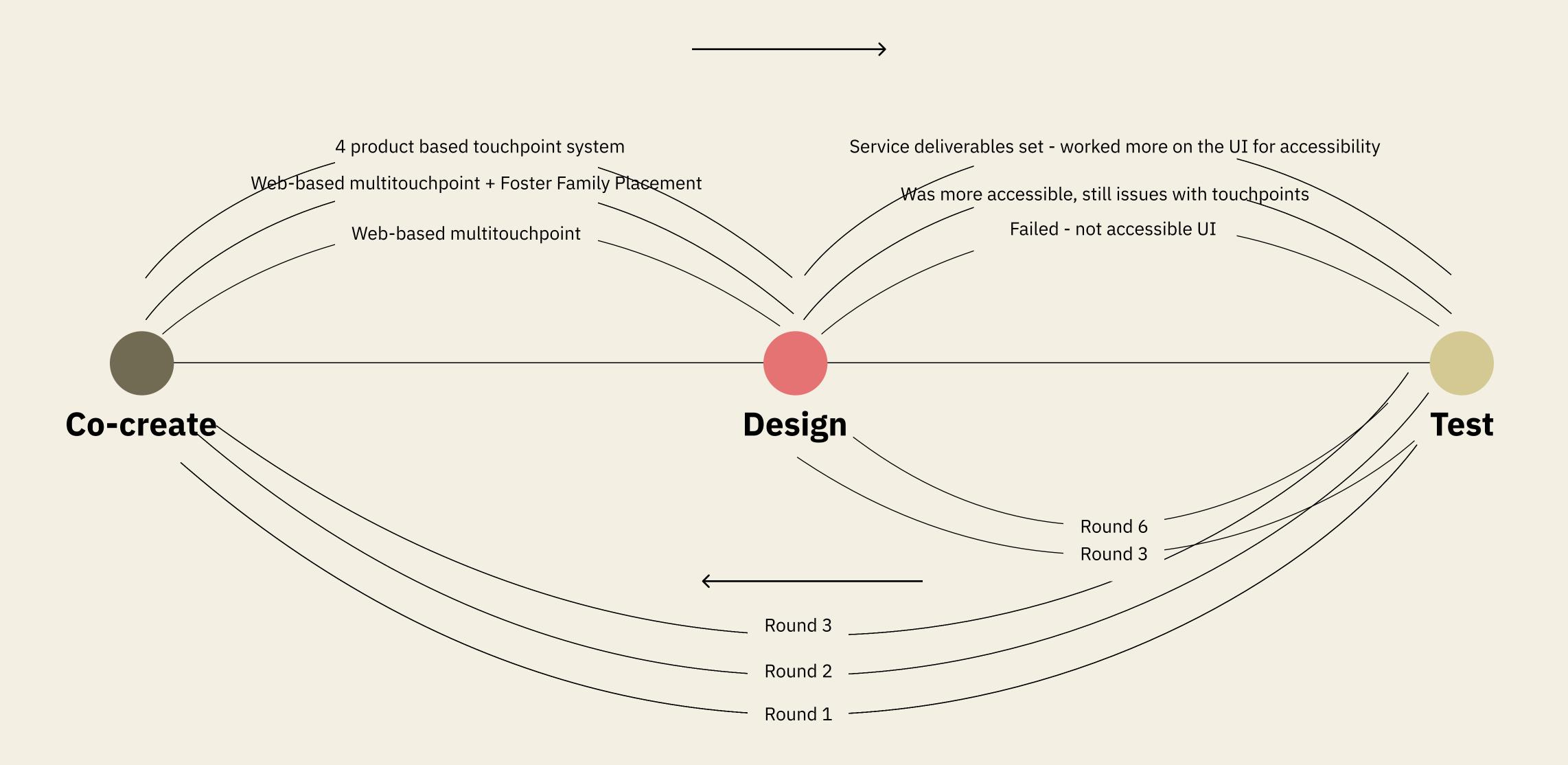




## Main Findings - Systems level

INTERVENTION				
CONTEXTUAL	Build for Agency		Center on Cultural Nuance	
BASELINE	"Do no harm" principle	Design for redundancy		Co-created with communites

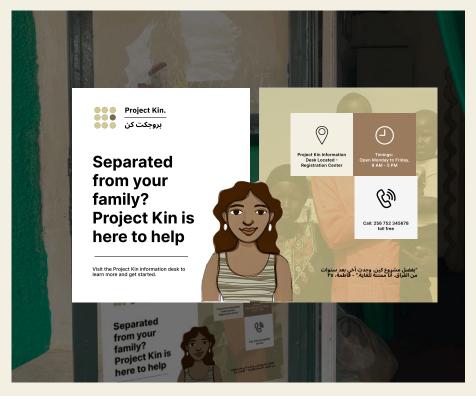
### **Intervention Design Process (Post Uganda)**



### Main Findings - Systems level

#### INTERVENTION









#### CONTEXTUAL

**Build for Agency** 

Center on Cultural Nuance

BASELINE

"Do no harm" principle

Design for redundancy

Co-created with communites

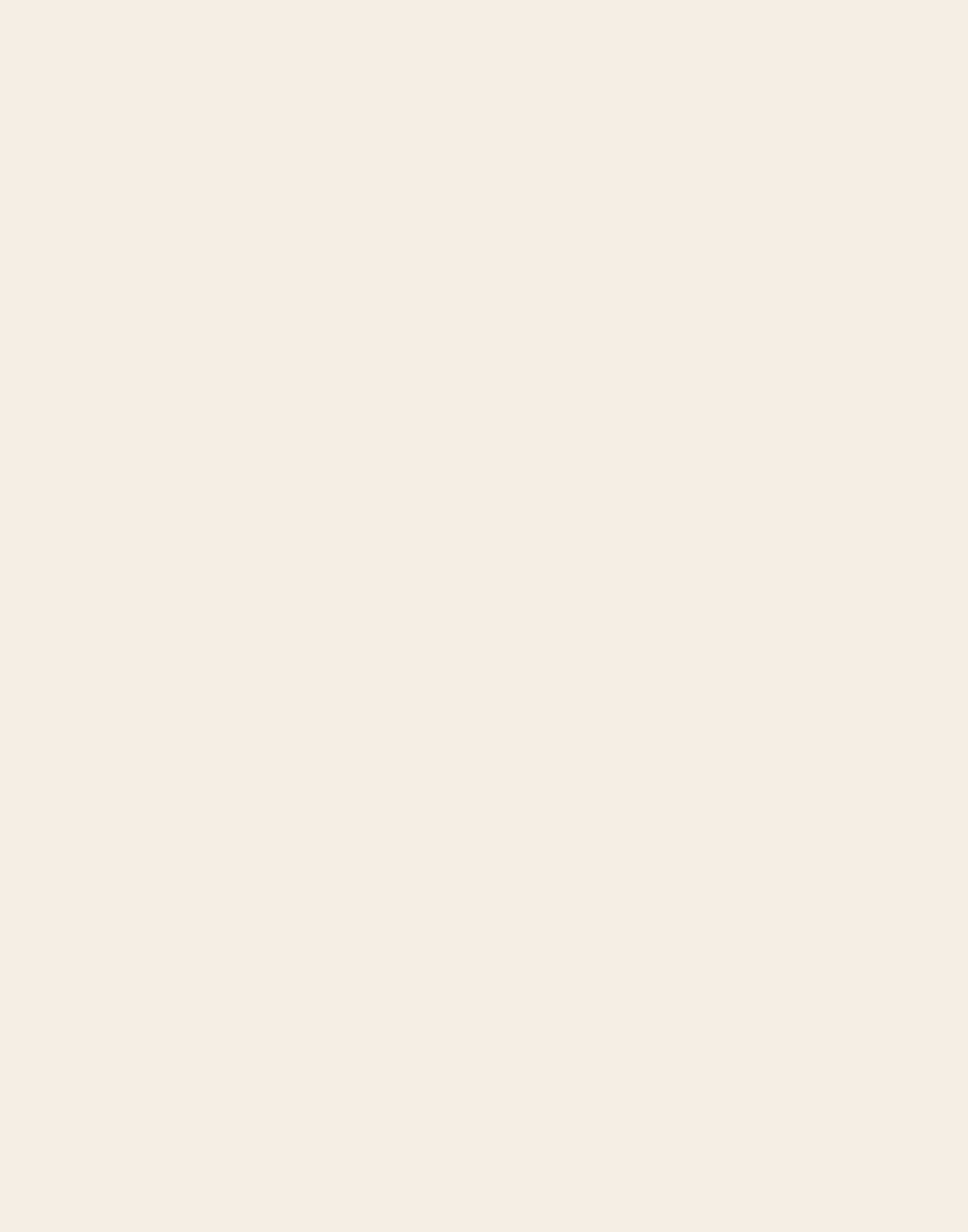
# We generated Project Kin



# We generated Project Kin



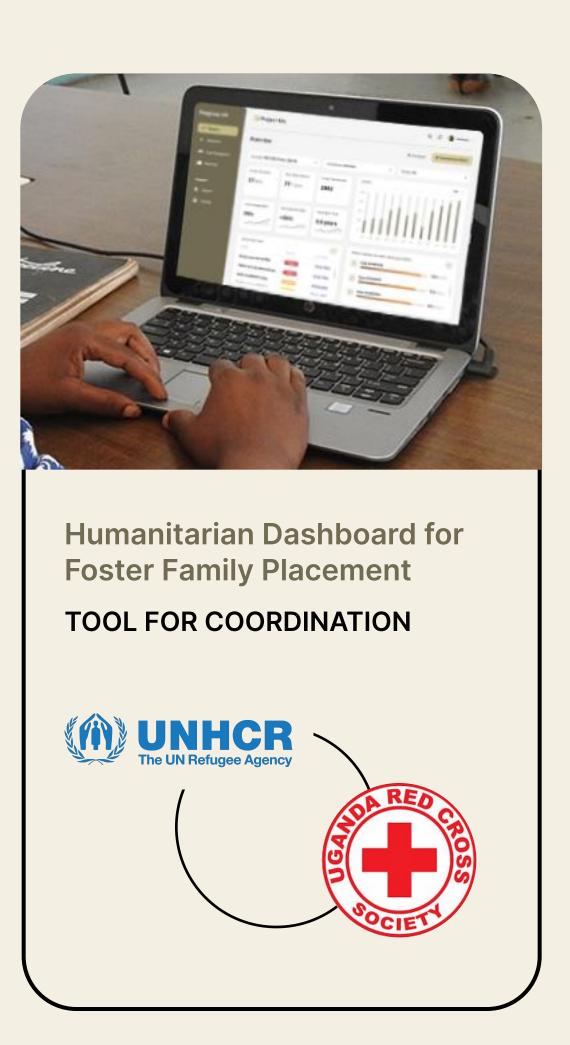




## We generated Project Kin



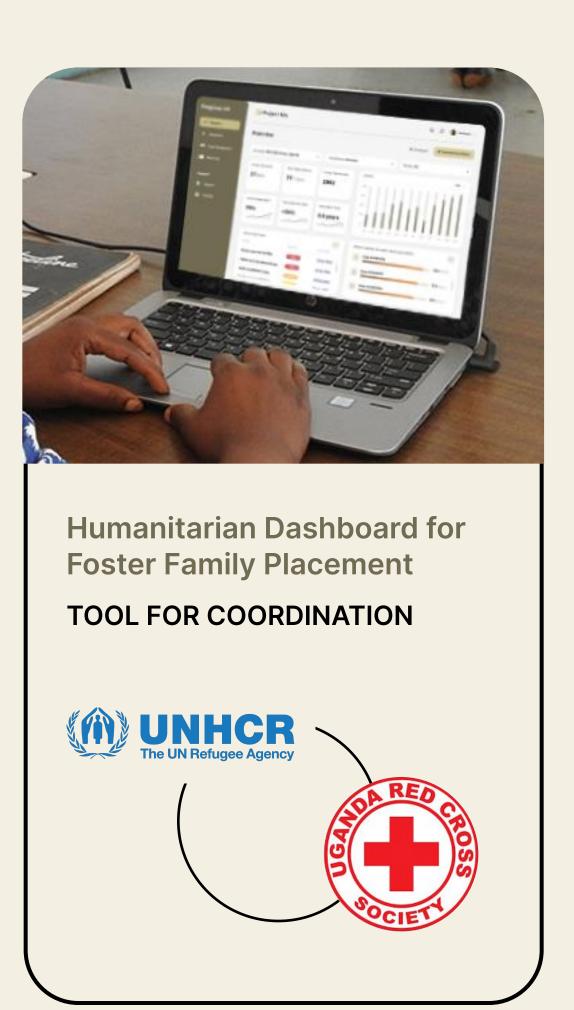


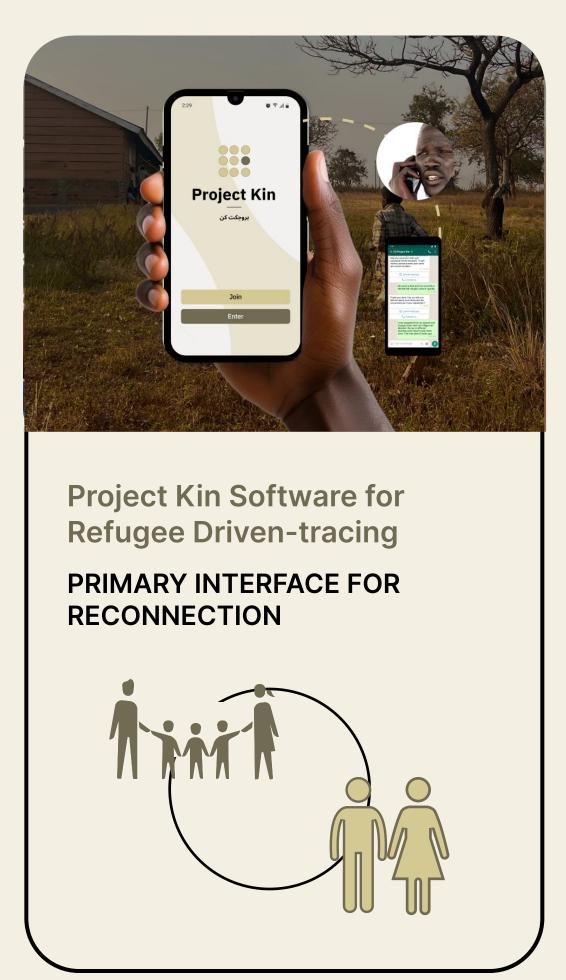


#### We generated Project Kin









#### **Feasibility Study**

#### <u>Participants</u>

20 (18-35; 8M 12F)

#### Breakdown

- 6 pairs of family members, 8 independents
- 3 location groups (India, Northeast US, Uganda)

#### <u>Test</u>

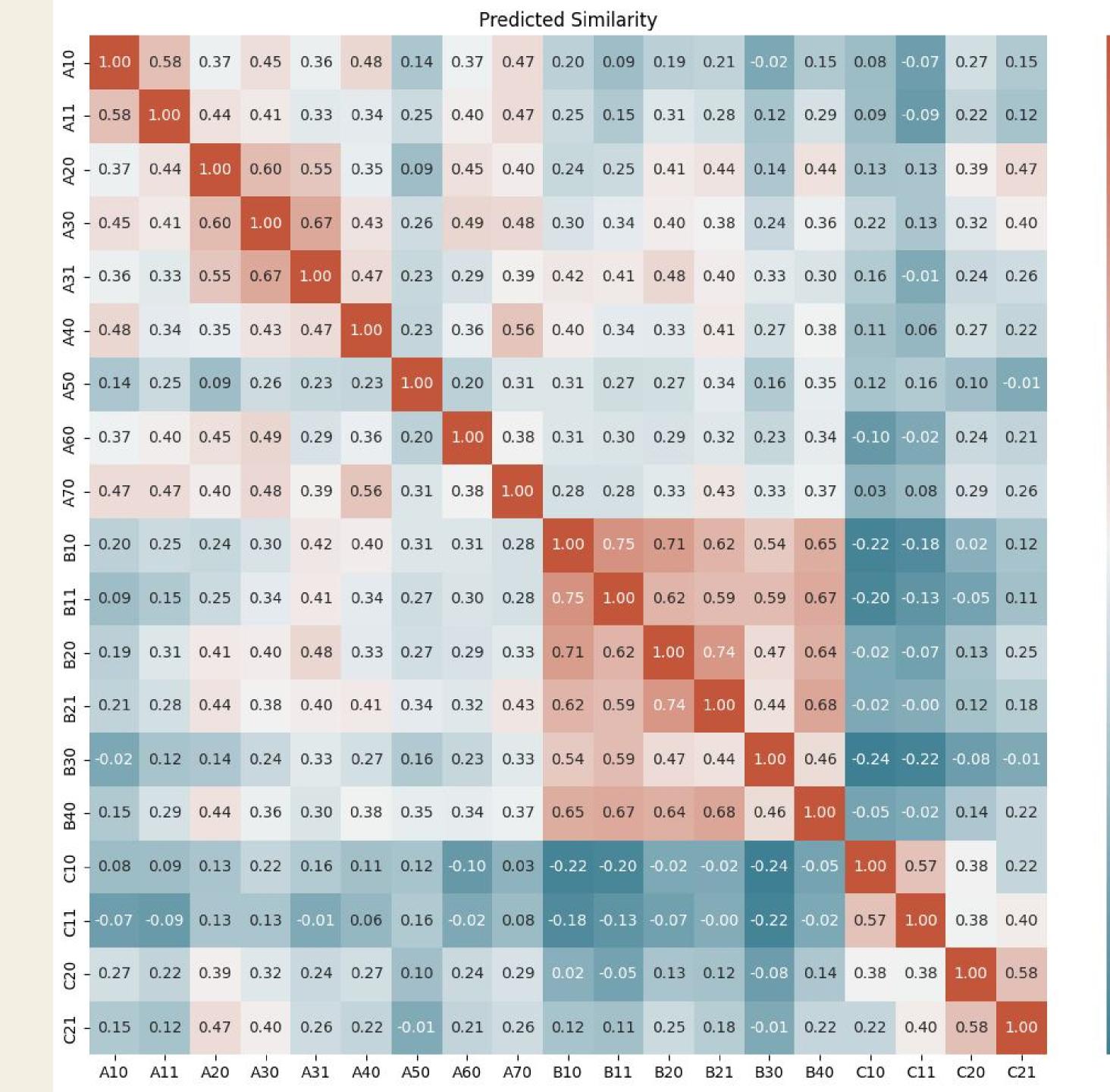
75 randomly selected questions (from set of 500)

Question	Response
2 Do you have any siblings?	Yes
3 Do you know your home address?	Yes
5 Was there a school near your home?	Yes
6 Were there any stores or restaurants close to your home?	Yes
B Do you have relatives living in the same city?	Yes
9 Did your family have any pets?	Yes
Does any of your family member have a distinct mark or tattoo?	Don't know
3 Is your family religious?	Yes
4 Did family used to sing songs together?	Yes
9 Did your family own a vehicle?	Yes
1 Was your house made of bricks?	Probably
2 Was your house black or white (not colorful)?	No
6 Was your house made of wood?	No
7 Did your family own a business?	No
2 Did your parents ever take you to their workplace?	Yes
5 Have you been photographed with your family?	Yes
6 Was there a lake or river nearby your home?	Yes
9 Did any of your siblings or parents wear glasses?	Yes
0 Was there a favorite pet in your family?	Yes
4 Did your family own any livestock or farm animals?	No
5 Did your family use to pray together?	Yes
6 Did anyone in your family have a medical condition?	Yes
Did you live in a city?	Yes
1 Did you live in a village?	No
3 Was your home near to a mosque or church or other religious building?	Yes
B Did you live near a border of your country?	No
Did your family farm for your food?	No
1 Was a train station or bus stop located near your home?	Probably
9 Did your family celebrate religious festivals together?	Yes
0 Was your house painted a particular color?	Yes
1 Did your family own a car or a bicycle?	Yes
2 Was there a school within walking distance from your home?	Probably
7 Did you play games in your front yard as a child?	Yes
B Did your home have a vegetable garden?	Yes

A11	0.58	1.00	0.44	0.41	0.33	0.34	0.25	0.40	0.47	0.25	0.15	0.31	0.28	0.12	0.29	0.09		0.22	0.12
A20	0.37	0.44		0.60	0.55	0.35	0.09	0.45	0.40	0.24	0.25	0.41	0.44	0.14	0.44	0.13	0.13	0.39	0.47
A30	0.45	0.41	0.60		0.67	0.43	0.26	0.49	0.48	0.30	0.34	0.40	0.38	0.24	0.36	0.22	0.13	0.32	0.40
ď																			
A40	0.48	0.34															0.06	0.27	0.22
A50	0.14	0.25	0.09	The 0 0.26	0.23	0.23	uesti C	omm	unit	y ide	ntiti	es <sup>27</sup>	0.34	0.16	0.35	0.12	0.16	0.10	
A60	0.37	0.40	0.45	0.49	0.29	0.36	0.20		0.38	0.31	0.30	0.29	0.32	0.23	0.34			0.24	0.21
A70	0.47	0.47	0.40	0.48	0.39	0.56	0.31	0.38		0.28	0.28	0.33	0.43	0.33	0.37	0.03	0.08	0.29	0.26
B10	0.20	0.25	0.24	0.30	0.42	0.40	0.31	0.31	0.28			0.71	0.62	0.54	0.65				0.12
B11	0.09	0.15	0.25	0.34	0.41	0.34	0.27	0.30	0.28			0.62	0.59	0.59	0.67				0.11

A11	0.58	1.00	0.44	0.41	0.33	0.34	0.25	0.40	0.47	0.25	0.15	0.31	0.28	0.12	0.29	0.09		0.22	0.12
A20	0.37	0.44		0.60	0.55	0.35	0.09	0.45	0.40	0.24	0.25	0.41	0.44	0.14	0.44	0.13	0.13	0.39	0.47
A30	0.45	0.41	0.60		0.67	0.43	0.26	0.49	0.48	0.30	0.34	0.40	0.38	0.24	0.36	0.22	0.13	0.32	0.40
ď									0.39										
A40	0.48								TING									0.27	0.22
A50	0.14	0.25	0.09	0.26	all's	iblir	ig pa	irsa	mon	ng th	e°pa	rtici	oant	pool	0.35	0.12	0.16	0.10	
A60	0.37	0.40	0.45	0.49	0.29	0.36	0.20		0.38	0.31	0.30	0.29	0.32	0.23	0.34			0.24	0.21
A70	0.47	0.47	0.40	0.48	0.39	0.56	0.31	0.38		0.28	0.28	0.33	0.43	0.33	0.37	0.03	0.08	0.29	0.26
B10	0.20	0.25	0.24	0.30	0.42	0.40	0.31	0.31	0.28			0.71	0.62	0.54	0.65				0.12
B11	0.09	0.15	0.25	0.34	0.41	0.34	0.27	0.30	0.28			0.62	0.59	0.59	0.67				0.11

#### **Results Heatmap**



- 0.8

- 0.6

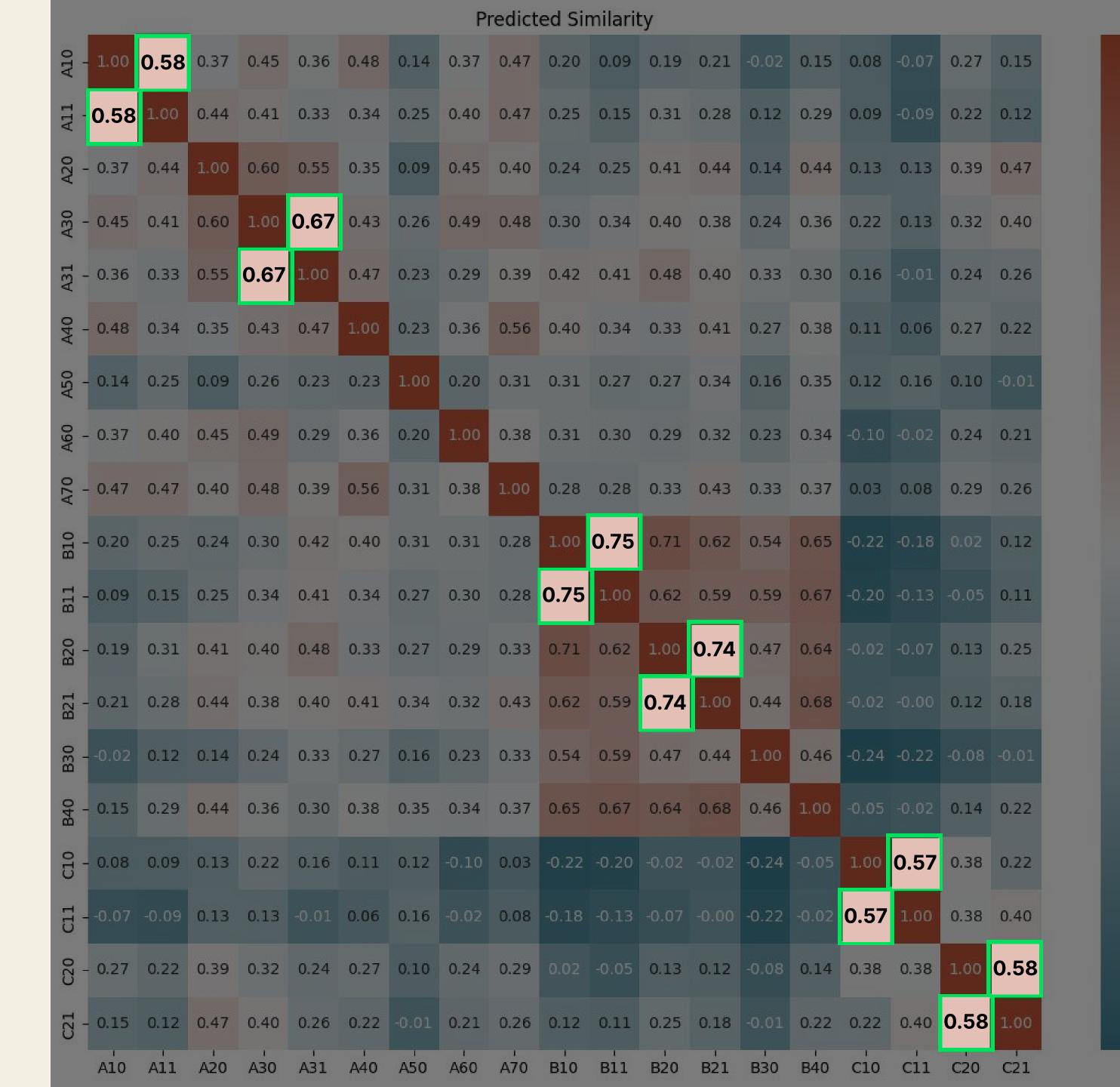
- 0.4

- 0.2

- 0.0

- -0.2

#### Sibling identified



- 0.8

- 0.6

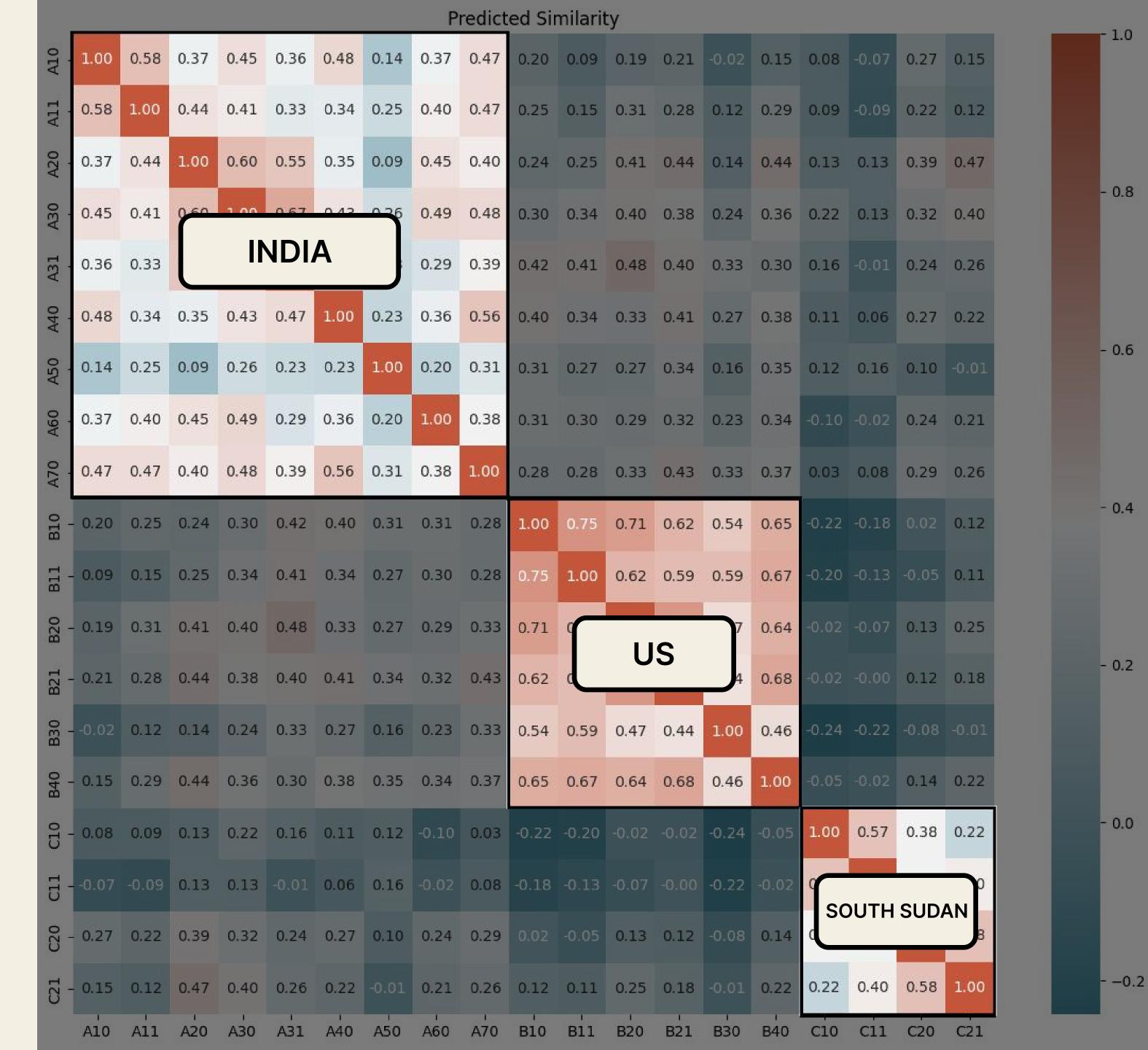
- 0.4

- 0.2

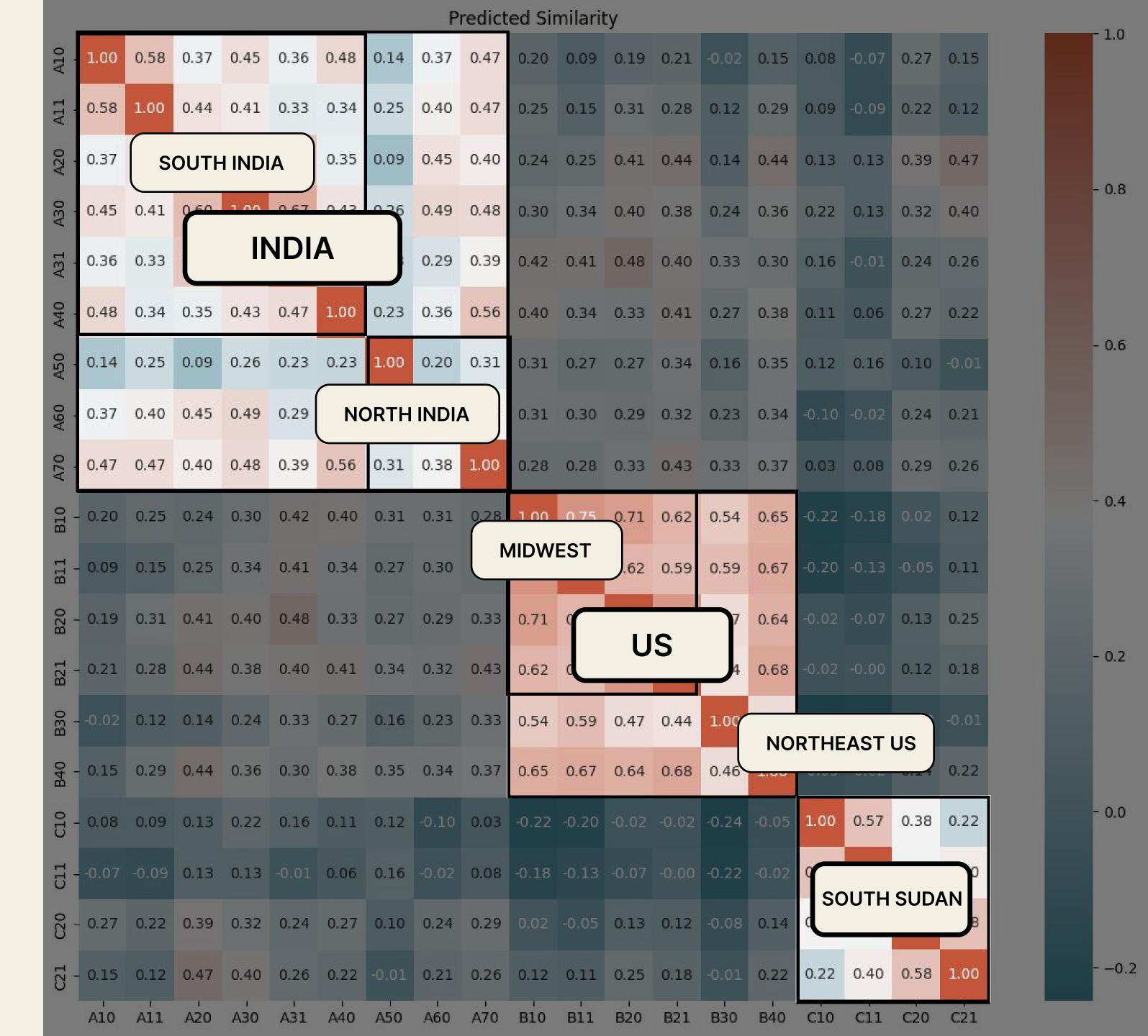
- 0.0

-0.2

#### **Communities identified**



#### **Communities identified**





#### Aya

#### **Our Mascot**

Provides guidance and support throughout the product journey

#### **Project Kin:**

Reuniting displaced families through a secure, user-friendly platform.

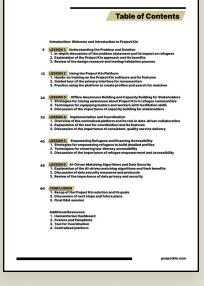




Distributes the reunification process among individuals, community members, and humanitarian workers, sharing the responsibility

### Understanding the service journey









**Time:** Before launch and ongoing

People: Community leaders, humanitarian workers preparing to facilitate reunification





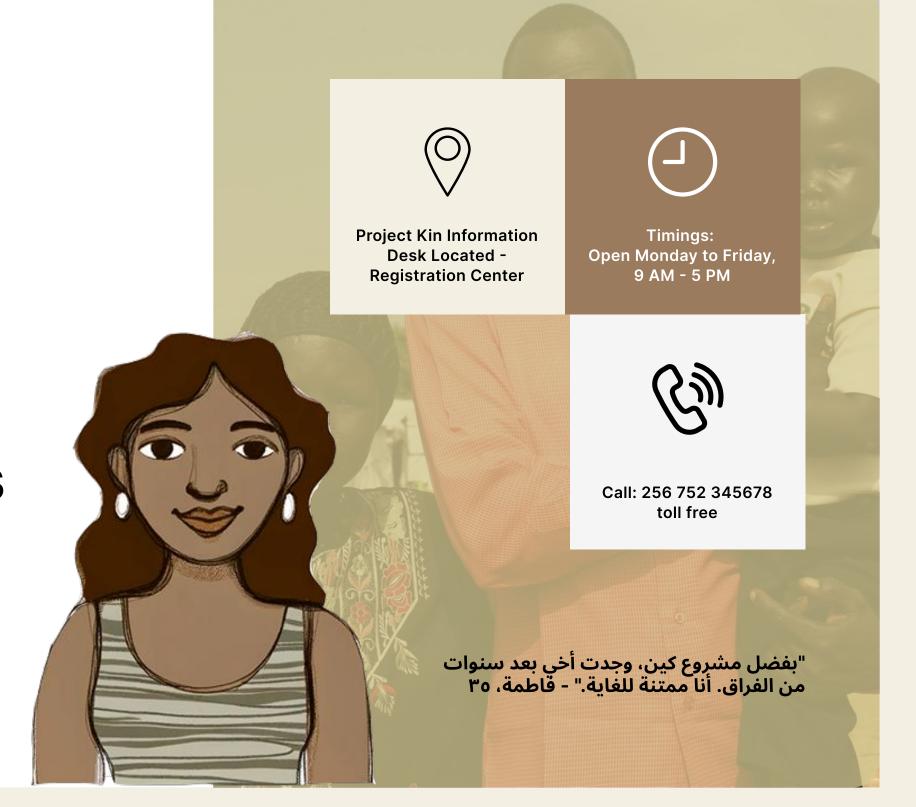
## Capacity Building through Training Module

**Equipping Stakeholders for Effective Implementation** 



# Separated from your family? Project Kin is here to help

Visit the Project Kin information desk to learn more and get started.



# Awareness through Posters and Pamphlets

Offline Awareness Building

**Time:** Days after arrival

<u>Place:</u> Prominently displayed in registration center

**People:** Displaced individuals, tired and anxious, seeking lost loved ones





# Awareness through Posters and Pamphlets

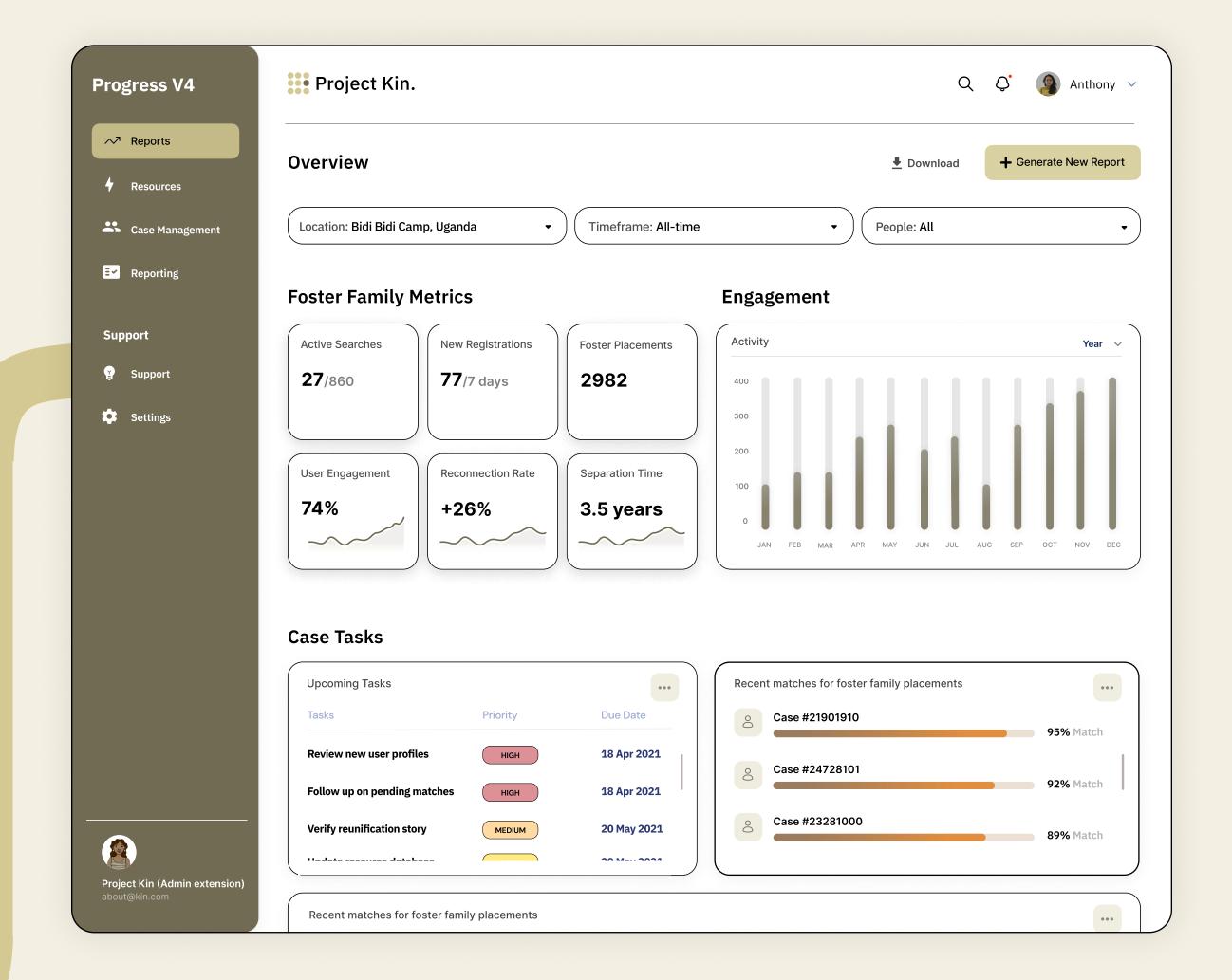
Offline Awareness Building

**Time:** Days after arrival

<u>Place:</u> Prominently displayed in registration center

**People:** Displaced individuals, tired and anxious, seeking lost loved ones





# Coordination through Humanitarian Dashboard

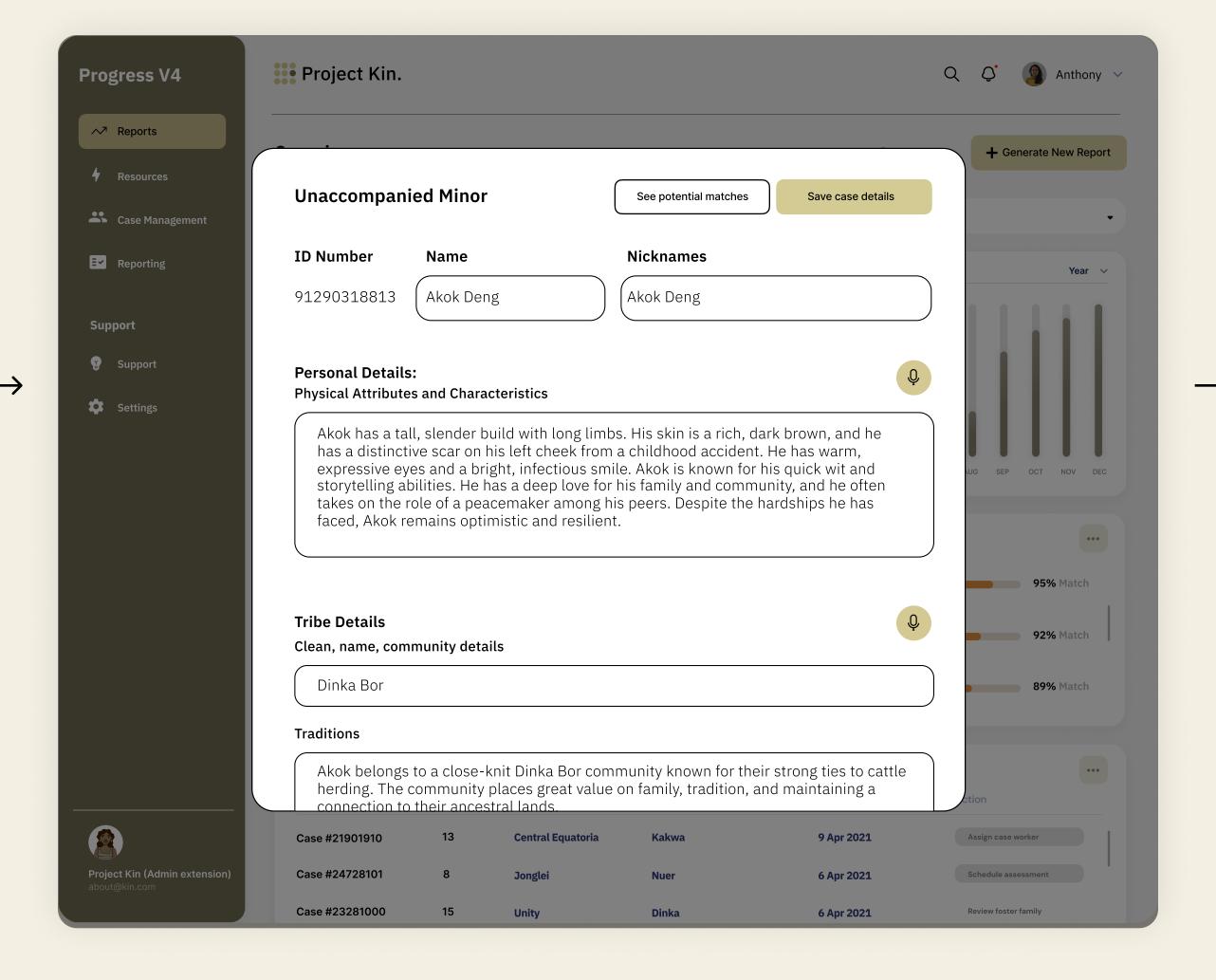
#### **Foster Family Placements**

**Time:** Upon identification of unaccompanied minors

<u>Place:</u> Humanitarian organization offices, field sites

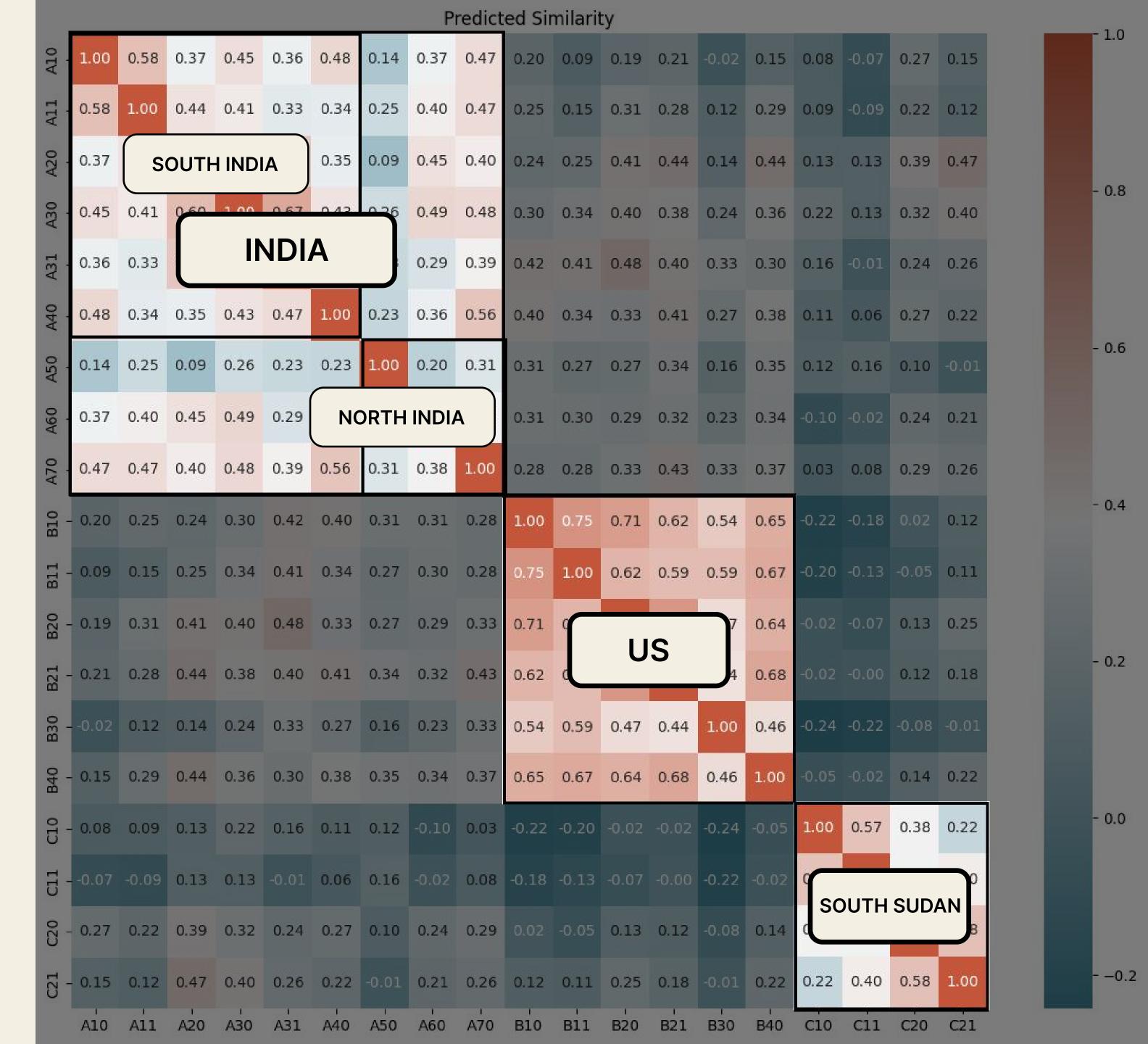
**People:** Humanitarian workers, case managers working to place unaccompanied minors in foster care

TRIBE, CLAN, CULTURE



CLOSEST FOSTER FAMILY MATCH

#### **Communities identified**



#### Project Kin Software -Empowering Refugees to Reconnect

**Multi-Channel Platform for Accessibility** 

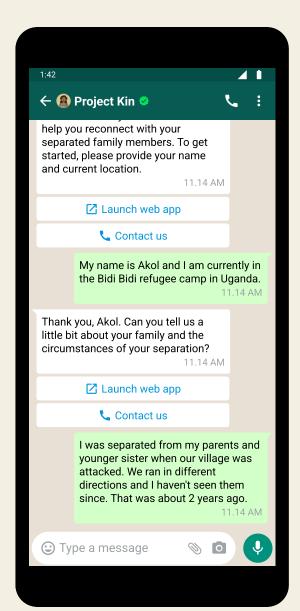
**Time:** Post registration

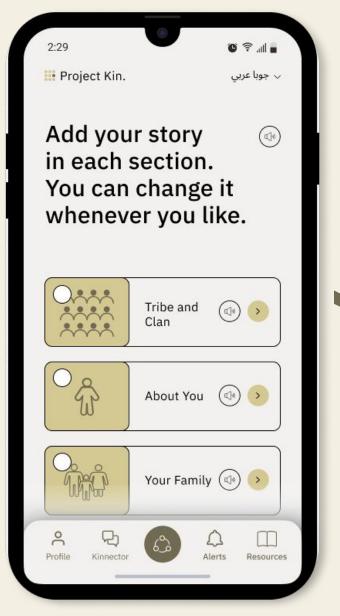
<u>Place:</u> Community centers, mobile devices for elders, schools, religious spaces

<u>Context:</u> Displaced individuals with separated family members through various accessible channels

#### **PHONE/IVR SYSTEM**







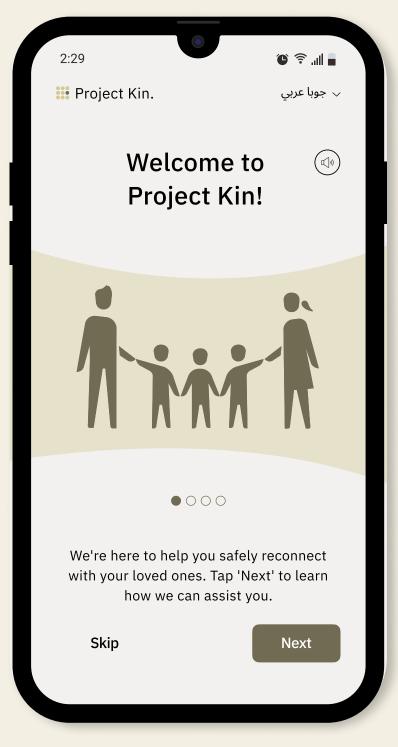


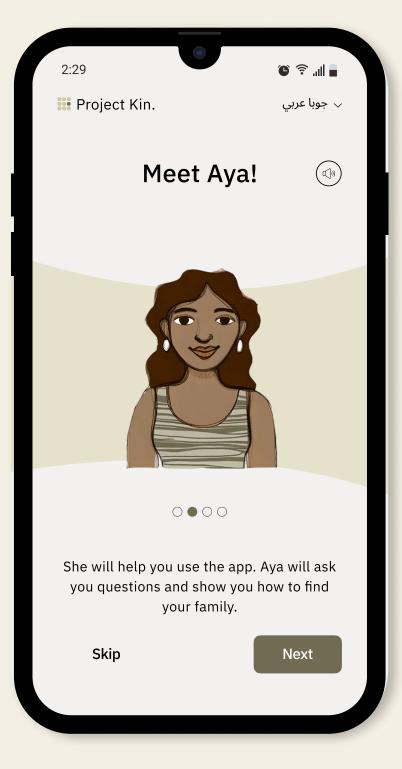
**WHATSAPP** 

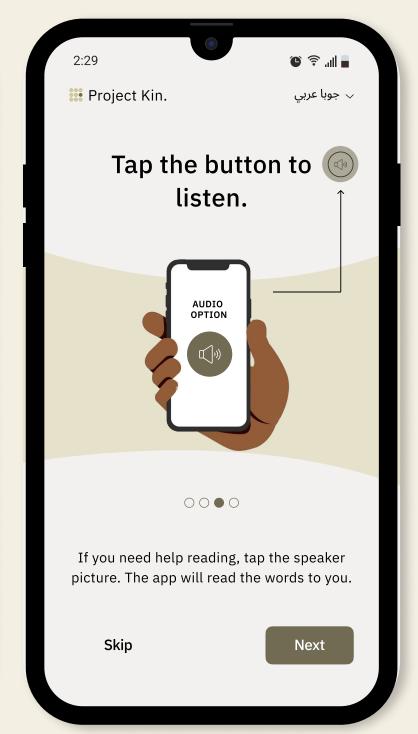
WEB

#### Onboarding







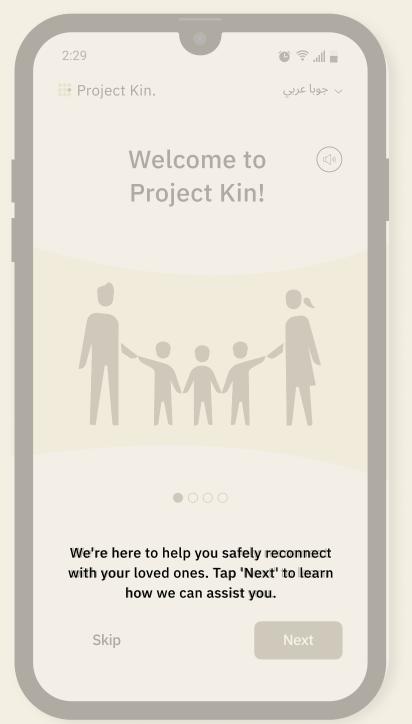


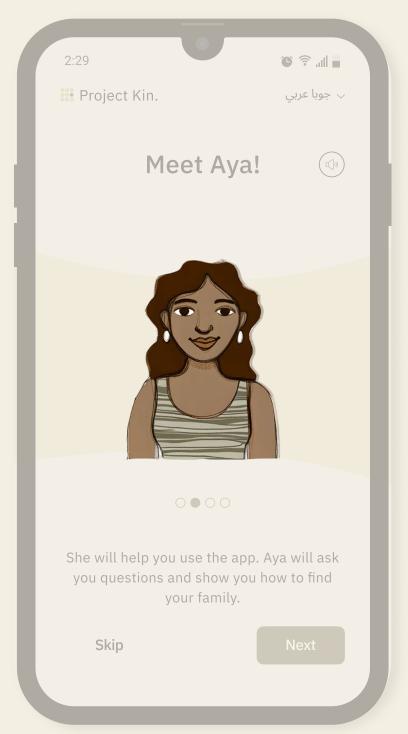
JOINING WELCOME MASCOT

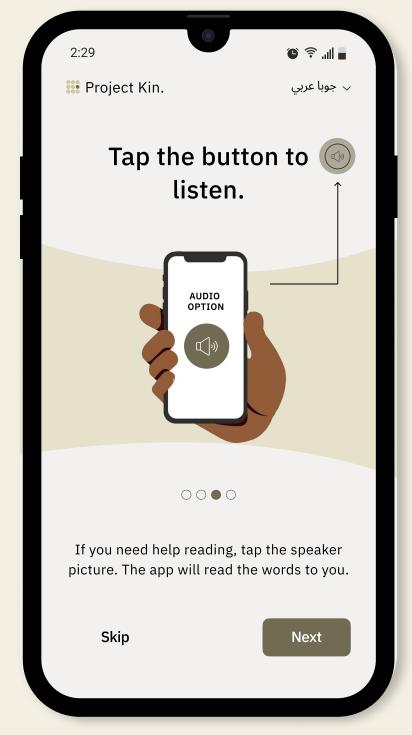
PROGRESSIVE FEATURE
TEACHING

#### Onboarding

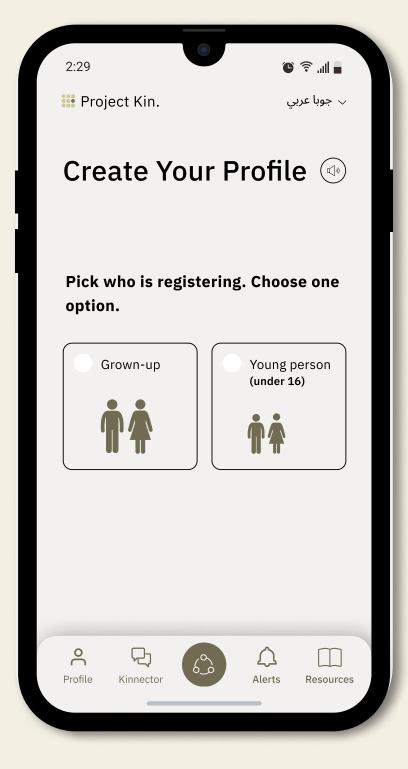


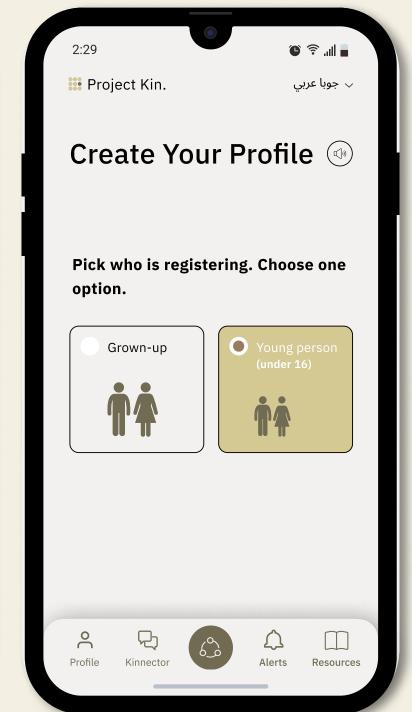


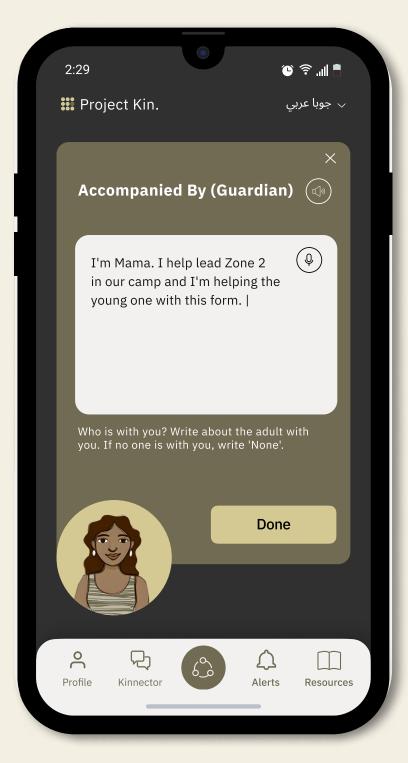


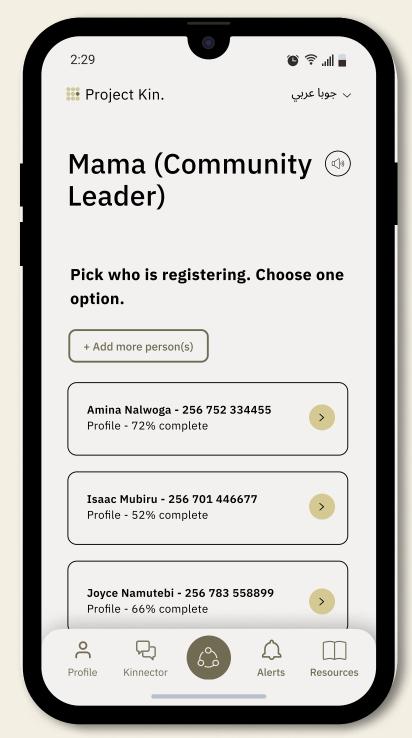


#### Registration

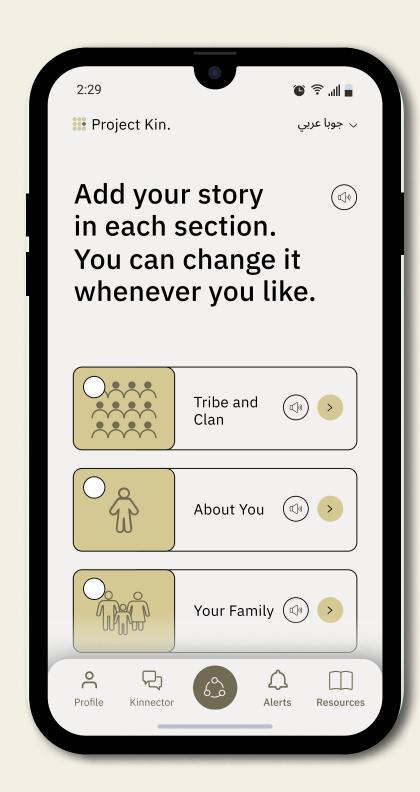


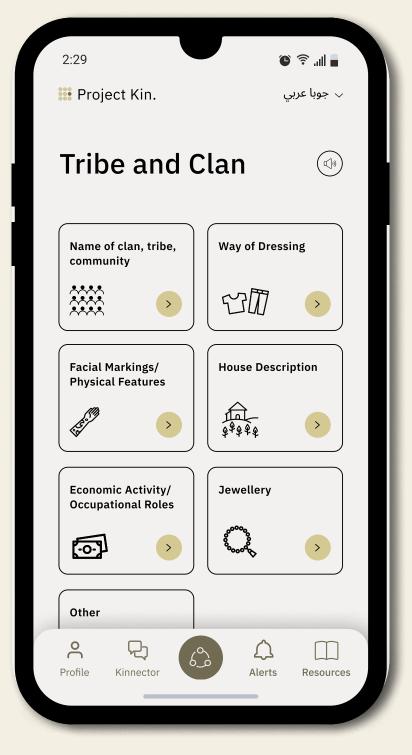


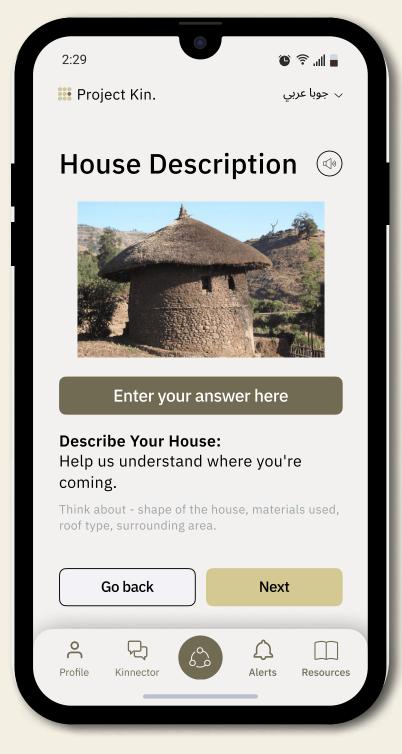




#### Profile Building









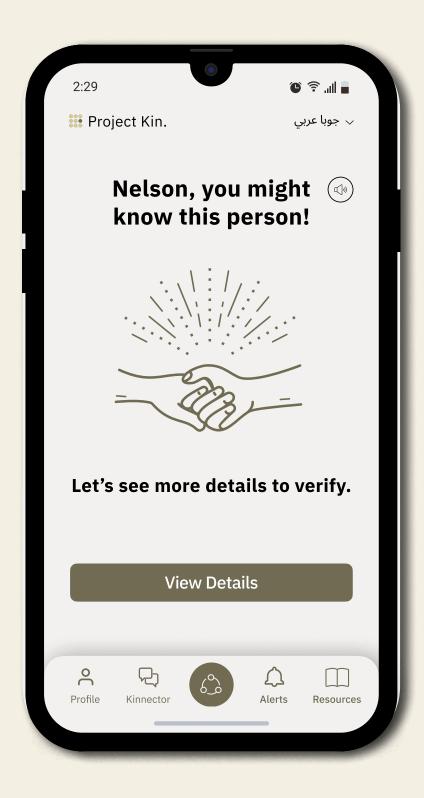
IDENTIFIERS, STORIES, AND CULTURAL DATA

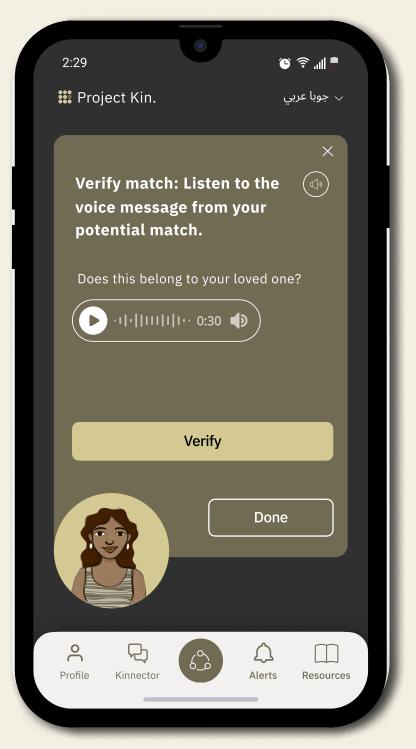
**COMMUNITY ELEMENTS** 

**CLAN/TRIBE ELEMENTS** 

**INPUT** 

#### Matching

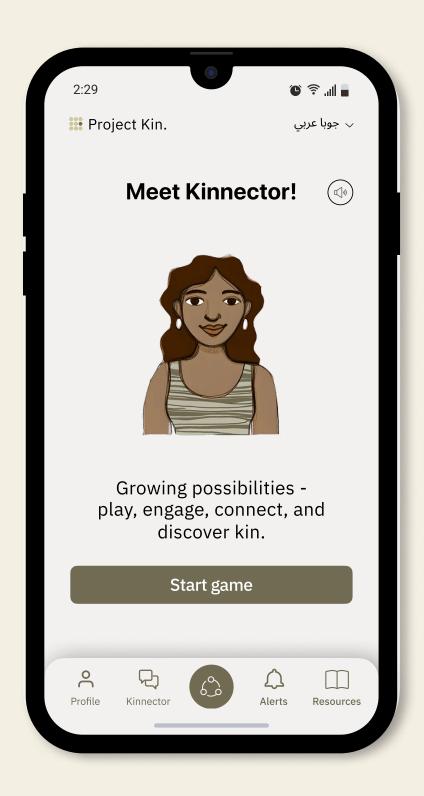


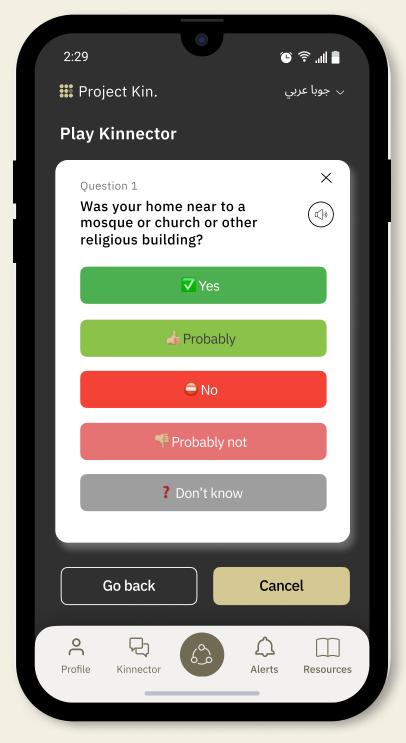


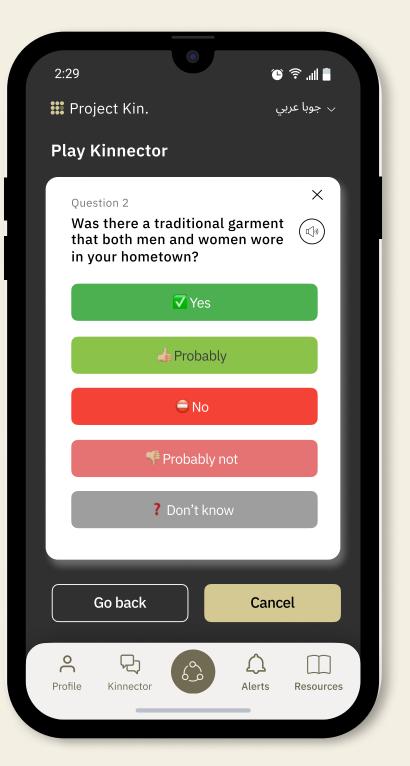
**NOTIFICATION** 

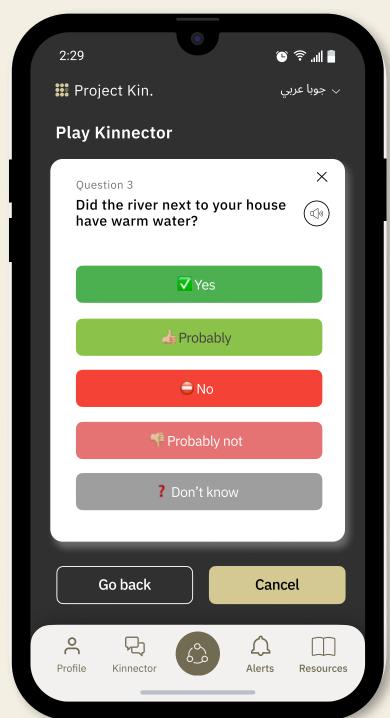
**VERIFICATION** 

#### Kinnector: Bridging Gaps

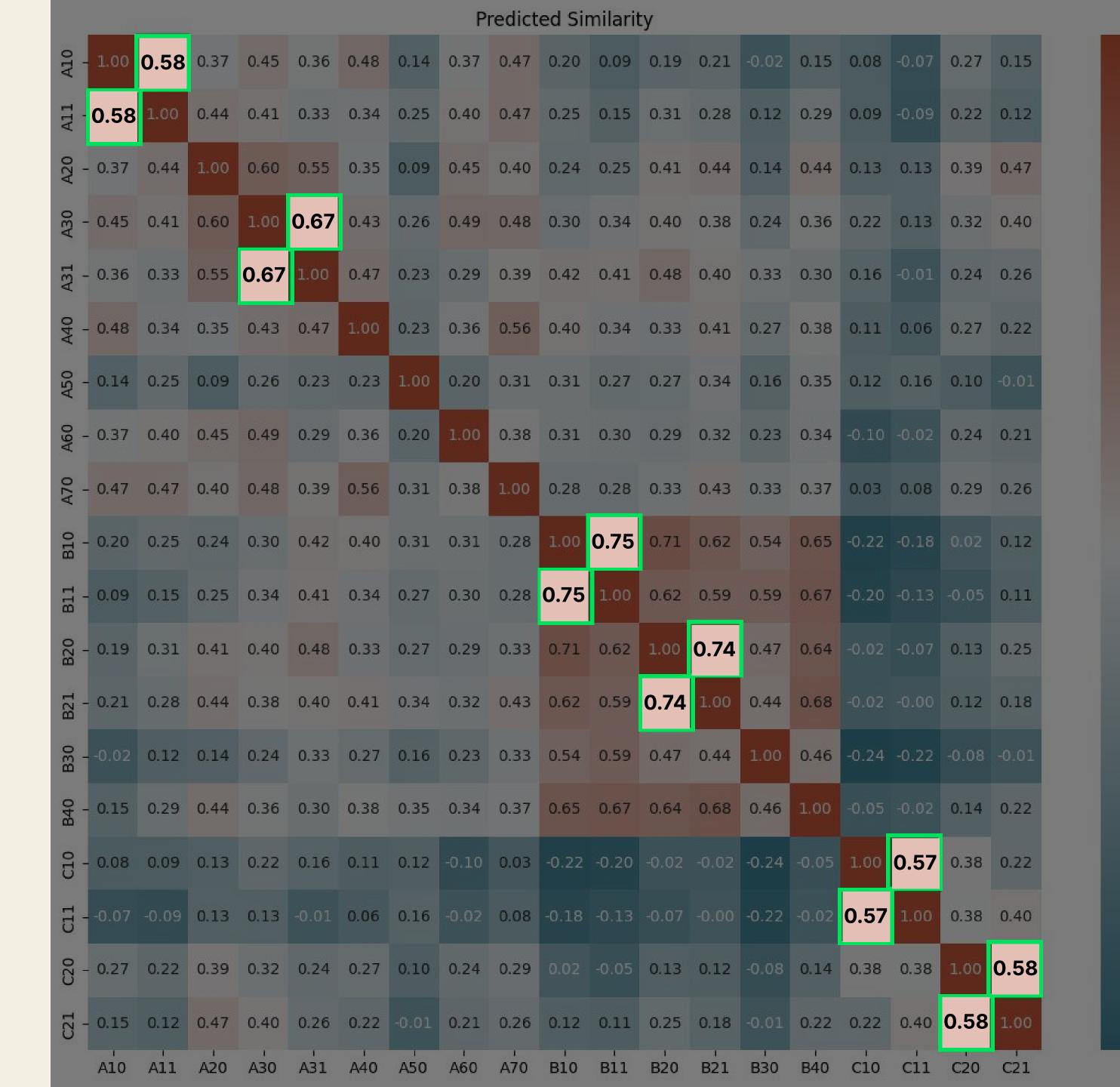








#### Sibling identified



- 0.8

- 0.6

- 0.4

- 0.2

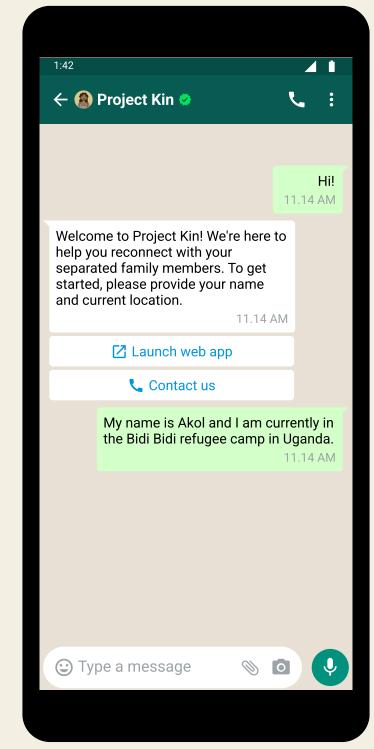
- 0.0

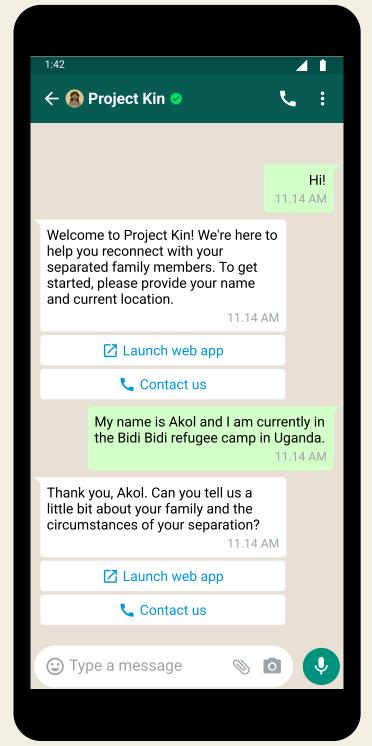
-0.2

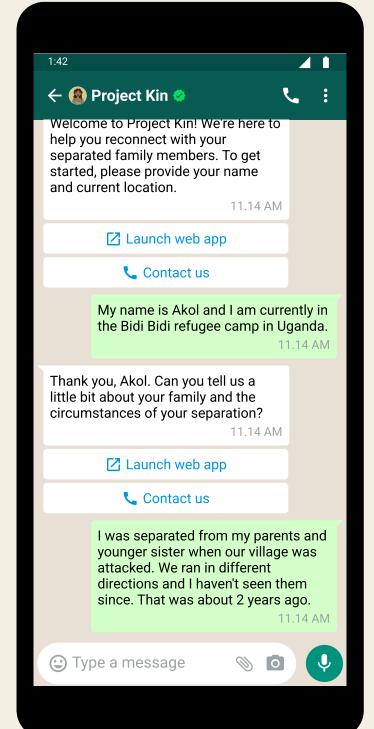
#### **Designing for redundancy.**

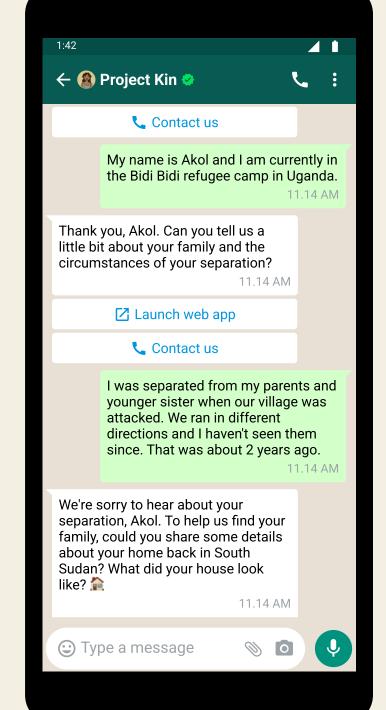
Whatsapp system as an alternative touchpoint





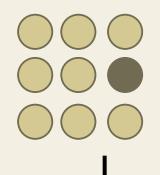






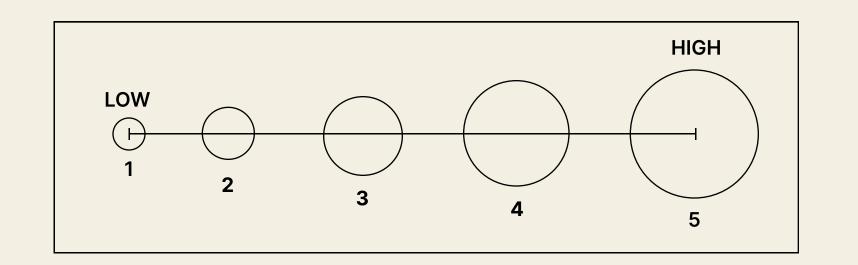


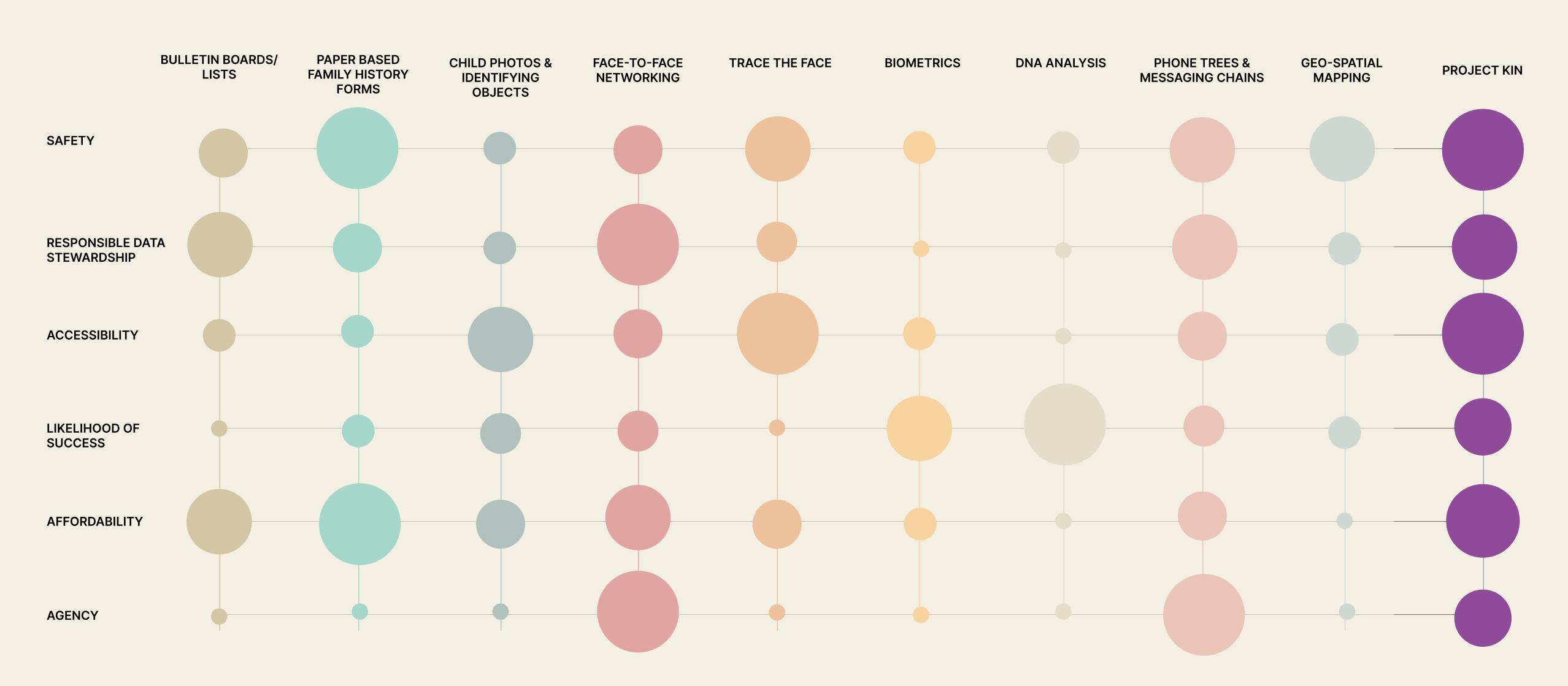
Whatsapp system as an alternative touchpoint



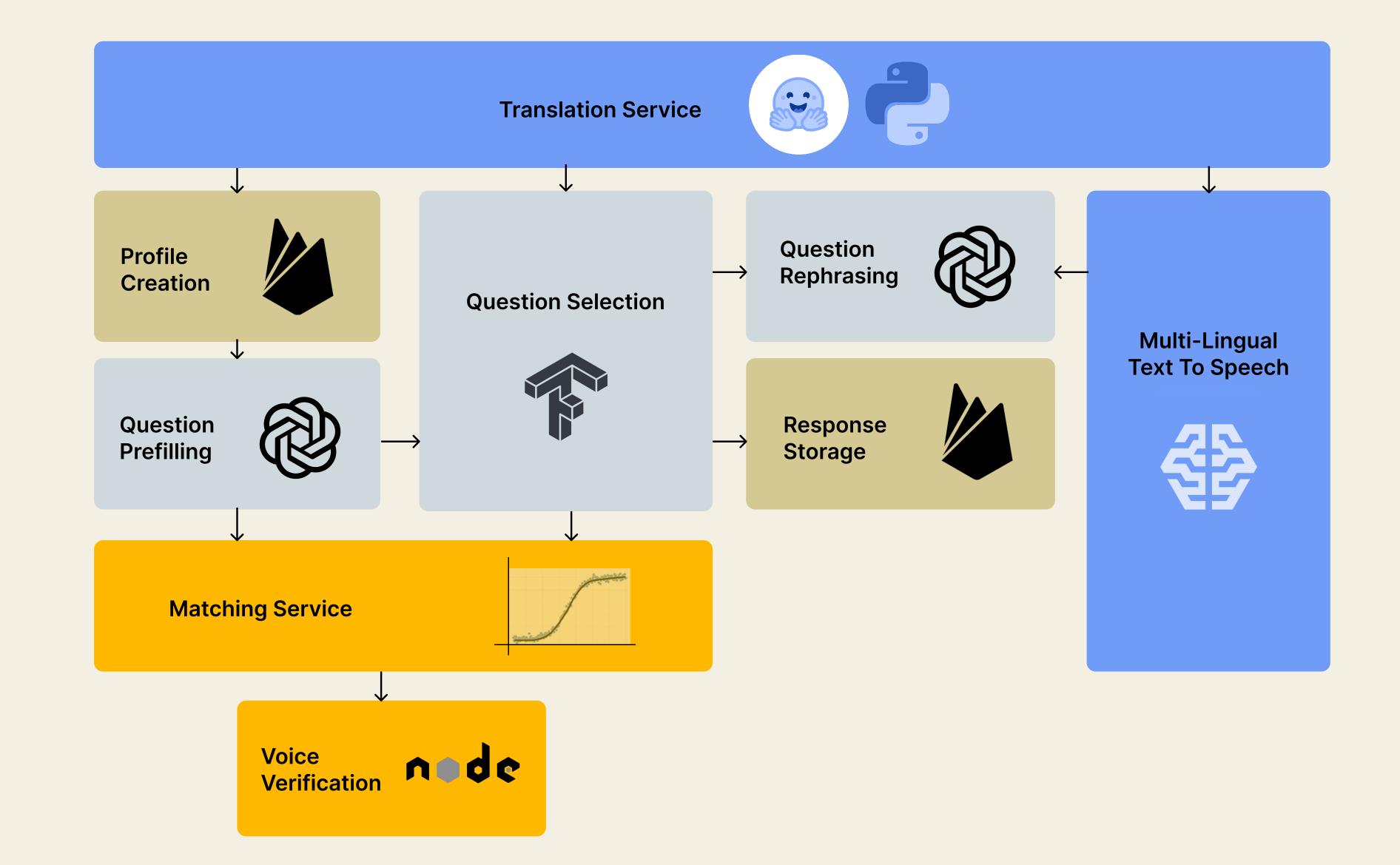


#### Comparison of existing methods with Kin

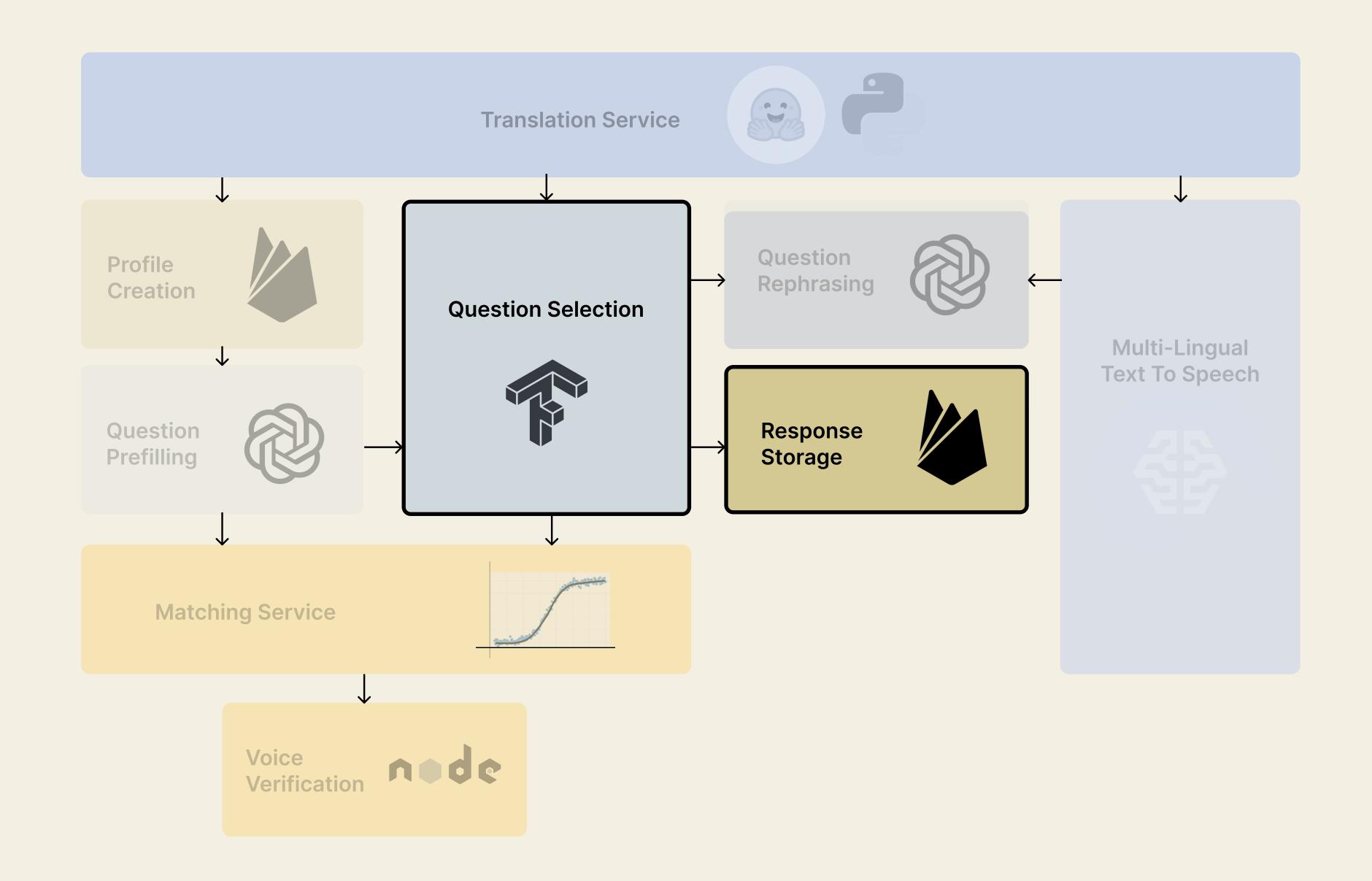




#### **Tech Pipeline**

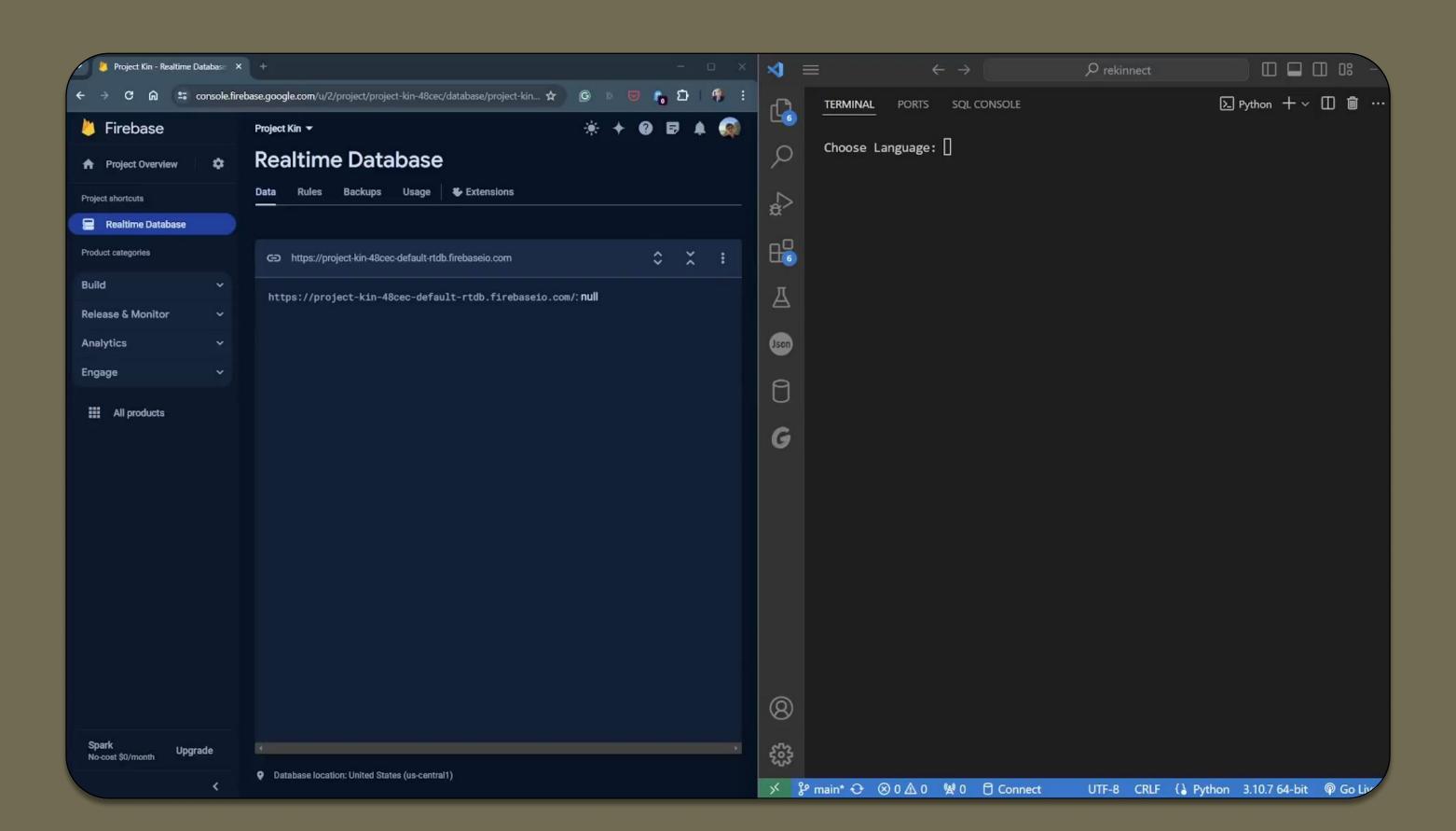


#### Tech Demo: Rekinnektor



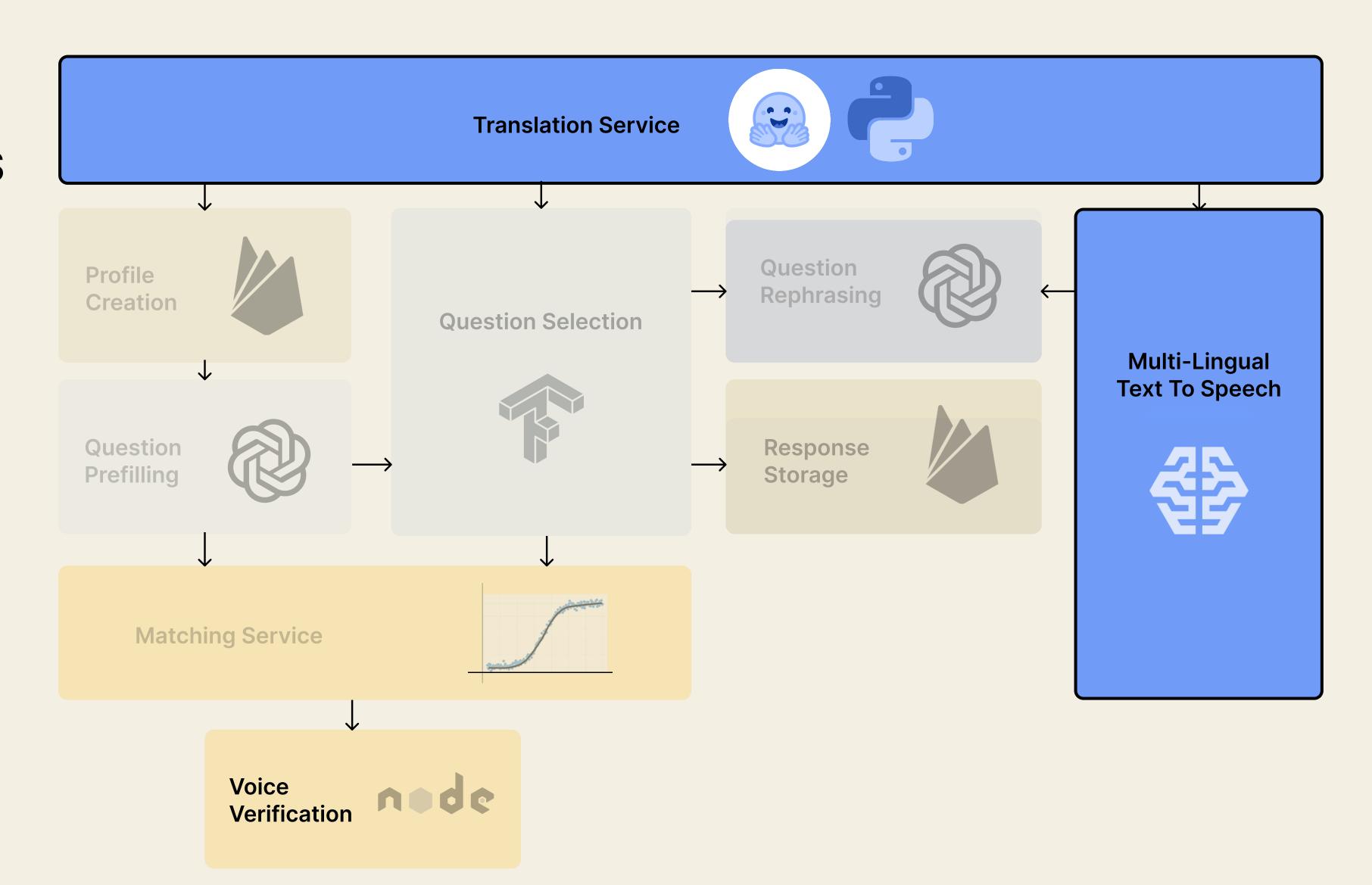


Frontend



Backend

#### Tech Demo: Translation and TTS





Frontend

```
Ton père a des tatouages?
Generating spoken audio...
.....
> PN
Response recorded
.....
Generating next question...
```

Backend

#### Limitations

1

#### **Age Limitations**

Children below the age of 3 and elderly over 80 may struggle to remember many of the questions

2

#### **Device Sharing**

Sharing physical devices to input info is nearly inevitable

3

#### **Dual Participation**

Requires both separated parties to independently use the platform

#### **Unintended Consequences**

1

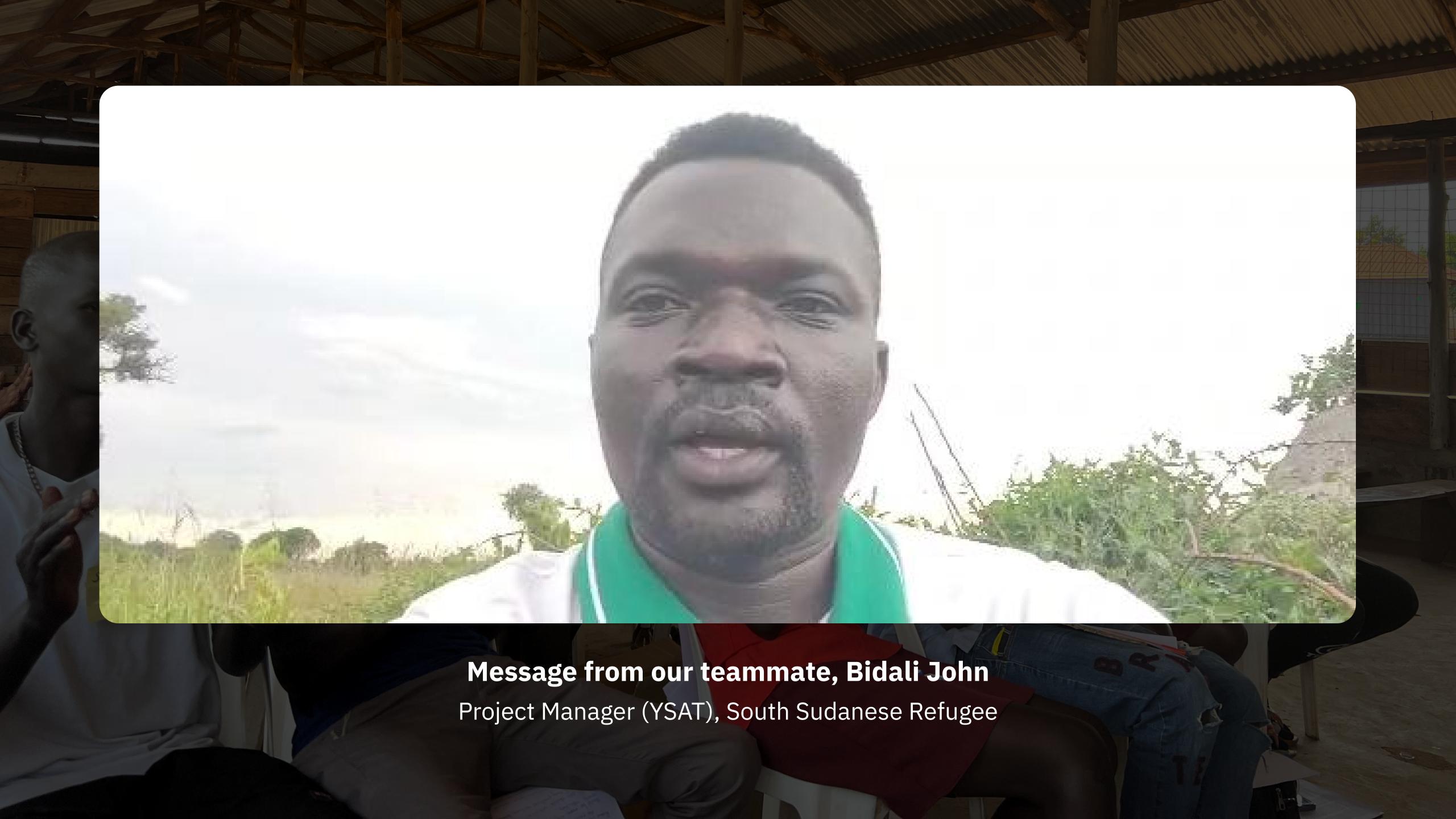
#### **Negative**

- Connection of parties that do not wish to be reached
- Potential for abuse by individual bad actors

2

#### **Positive**

 "Pollination Effect" - if you find one match there's a way to find community matches



#### The product is informed by and co-created with

John Mark
Viola Stephen
Lak Jesca
Bidali John
Sandy
Betty Asa
Rose Woja

Peter

Davis

Rogers

John Mark

Rina Ittia

Ochilo

Nelson

Steven Lobor

Jane Esther Benjamin

Betty Kelli

Justo Kabas

Taban Alfred

Robert

Mary

Peter

Wani

Betty W

Itia

Ken

Nelly W Baiga Samuel John

Zeka Enock

Joseph

James Salah

Zeka Enock

Jon W

Agaba Davis

Jon Jal Dak

Joyce

Vicky

Sebit

Abokarach Vich

Lucy Lokang

Florence Amita

Betty Sunday

Sulan Sadio

Roda Kani

Aber Fiona

Stella Ayozua

David Lukudu

Thomas Mawa

Fabian Lupai

Alica Akot

Betty Nancy Peter

Barak Mark

Redia Nancy

Goya Gladu Isaac

Mary Kiden Enosa

Grace Itia

Ropan Joyce

Steven Lobur

Robert Khemis

Clement Wani

Nelson Woja

Peter Maliya

Betty Keji

Nema Betty

Stephen Lomo

Foni Rose

Anzoa Peace

Vivky Adokorach

Richard Remo

Betty Somia

Genaro Peter

Mourini Jovia

Besta Ajonye

Justo Manash

Amos Juma

Rose Sidma

Esther Nurh

Amani Joyce

Justo Kabas Oliver

Ntuku Milton

Stephen Taban Paul

Kennedy Hakim

Jane Esther Benjamin

Yeka Enock Jamba

Batal Bernard Clement

Lak Jesca

Taban Alfred

Yeka Enock

Jackline Sonyi

Neima Ileli

Bettu Keji Taban

Joyce Akujo

Selina Adare



#### Security

#### From a design front

- Matches only revealed to parties after voice verification is confirmed by the other party
- Reconnection occurs digitally on a shared/recorded line to protect personal contacts
- Users can delete their records anytime

#### Ideal backend security

Precedent: PROJECT CALLISTO

Encryption

Unreadable without a specific key

Legal

Information
would legally
protected
from subpoena
in most
jurisdictions.

Audits

Third parties regularly audit the system for vulnerabilities

Hosting

Secure data centers with strict security measures

#### **Next Steps**

1

#### **Testing**

Test prototype
(design and tech)
beyond the South
Sudanese context,
and expand to other
places of conflict

2

### **Implementation Plan**

Complete implementation lesson plan and distribute paper signage materials

3

#### **Funding**

Philanthropic grants, crowdfunding, corporate sponsorships, and government/international organization grants





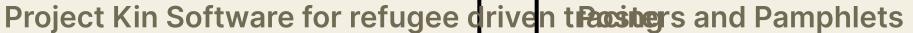
#### **Service Touchpoints**



#### **Humanitarian Dashboard for** footer-form placement COORDINATION

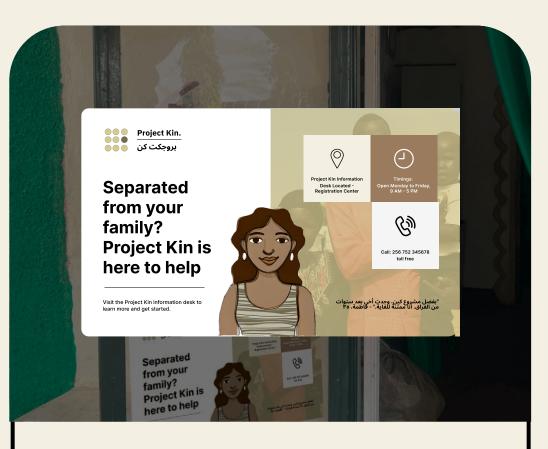
- Centralized platform
- Matches unaccompanied minors with foster families
- Enables datadriven collaboration





#### PRIMARY INTERFACE FOR **RECONNECTION**

- Built for low-literacy and accessibility
- Empowers refugees to build detailed profiles
- Utilizes Al-driven matching algorithms



#### **OFFLINE AWARENESS BUILDING**

- Raises awareness
- Communicates key service information
- Encourages participation through visibility



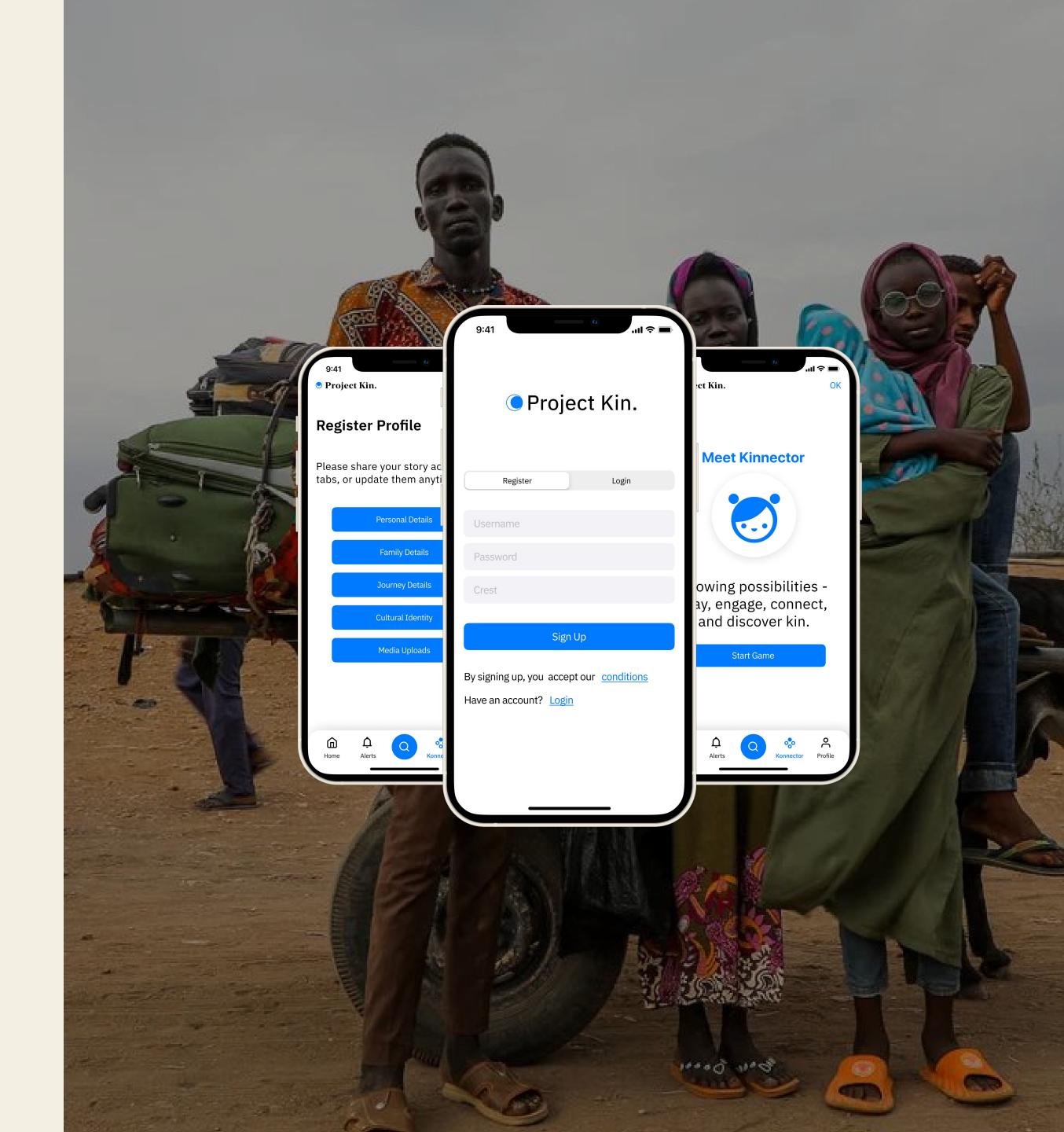
#### **Session Plan/Training Module**

#### **CAPACITY BUILDING FOR STAKEHOLDERS**

- Equips leaders and workers with facilitation skills
- Provides structured implementation approach
- Ensures consistent, quality service delivery

### Project Kin.

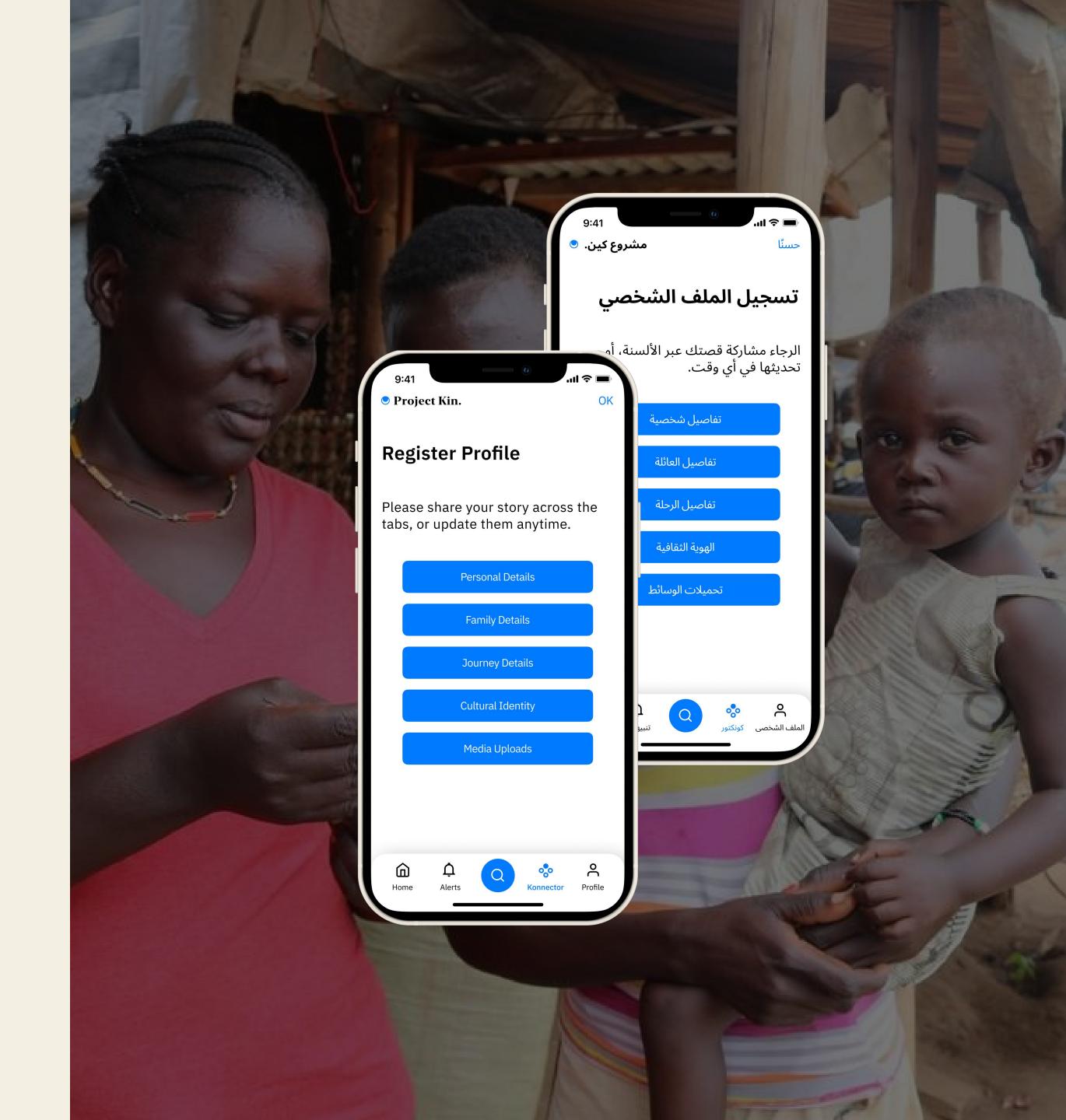
The first accessible, refugee-focused platform empowering displaced individuals to find their kin through cultural identity and memory sharing, now with expanded culturally rooted identifying factors, all while ensuring privacy in reconnecting separated families.



#### How it Works



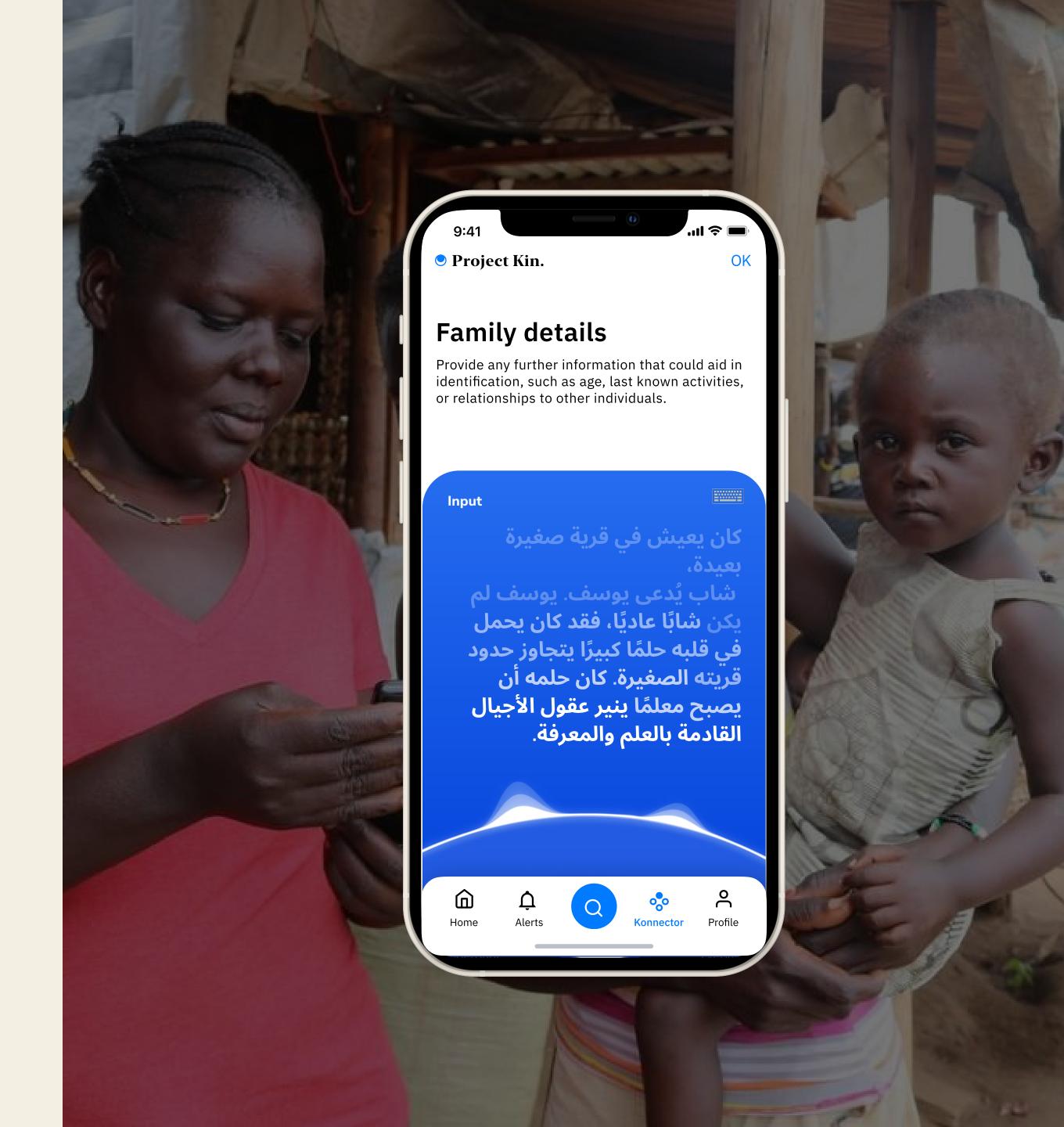
Create detailed personal profiles of <u>identifiers</u>, <u>stories</u>, <u>and</u> <u>cultural data</u>



#### **How it Works**



Create detailed personal profiles of <u>identifiers</u>, <u>stories</u>, <u>and</u> <u>cultural data</u>



#### **How it Works**



Create detailed personal profiles of <u>identifiers</u>, <u>stories</u>, <u>and</u> <u>cultural data</u>



Gamifying questions aid profilebuilding to better matchmaking

