

CT Innovation Lab

Imagining the future of women's contraception

Process Overview / March 2018



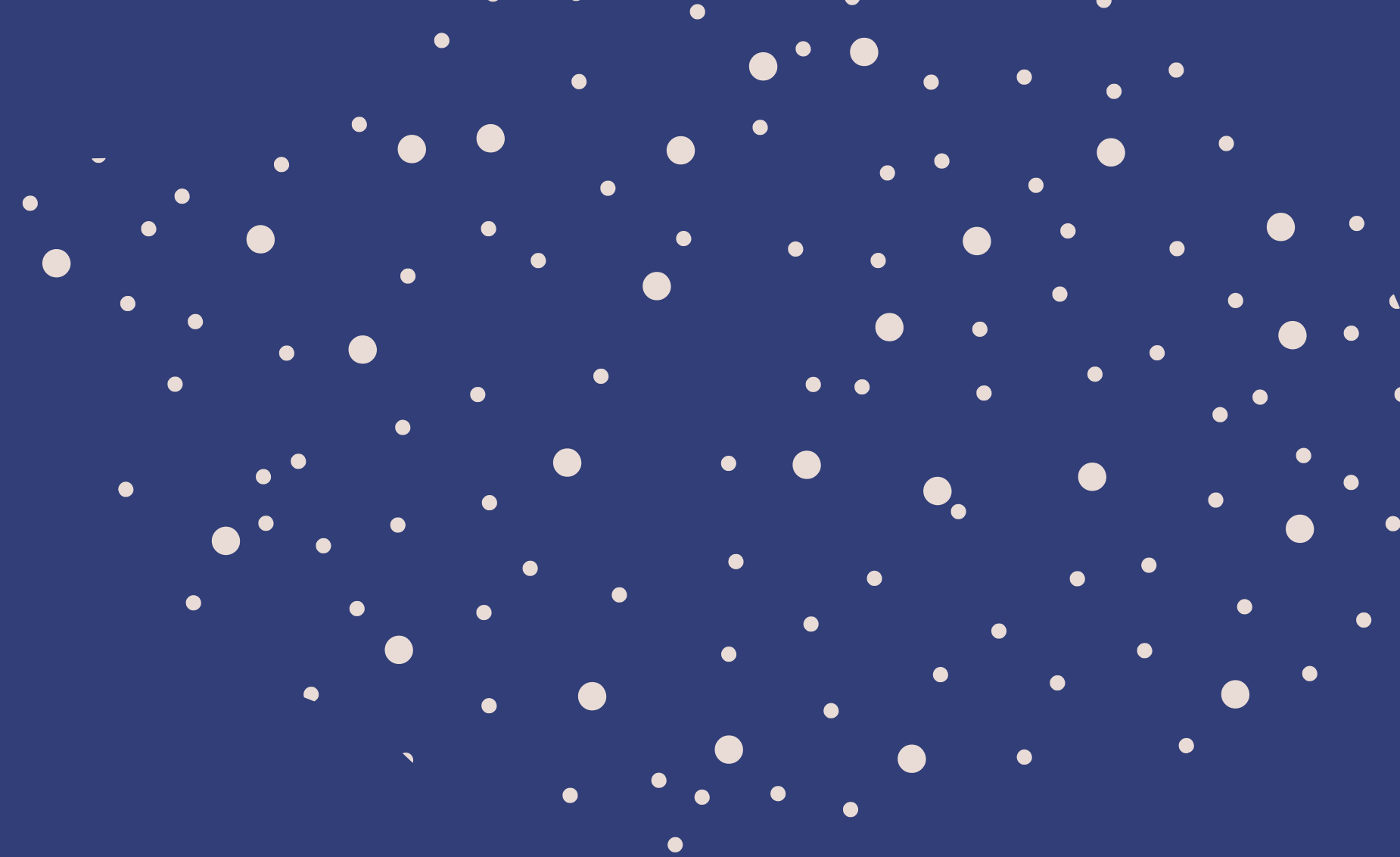
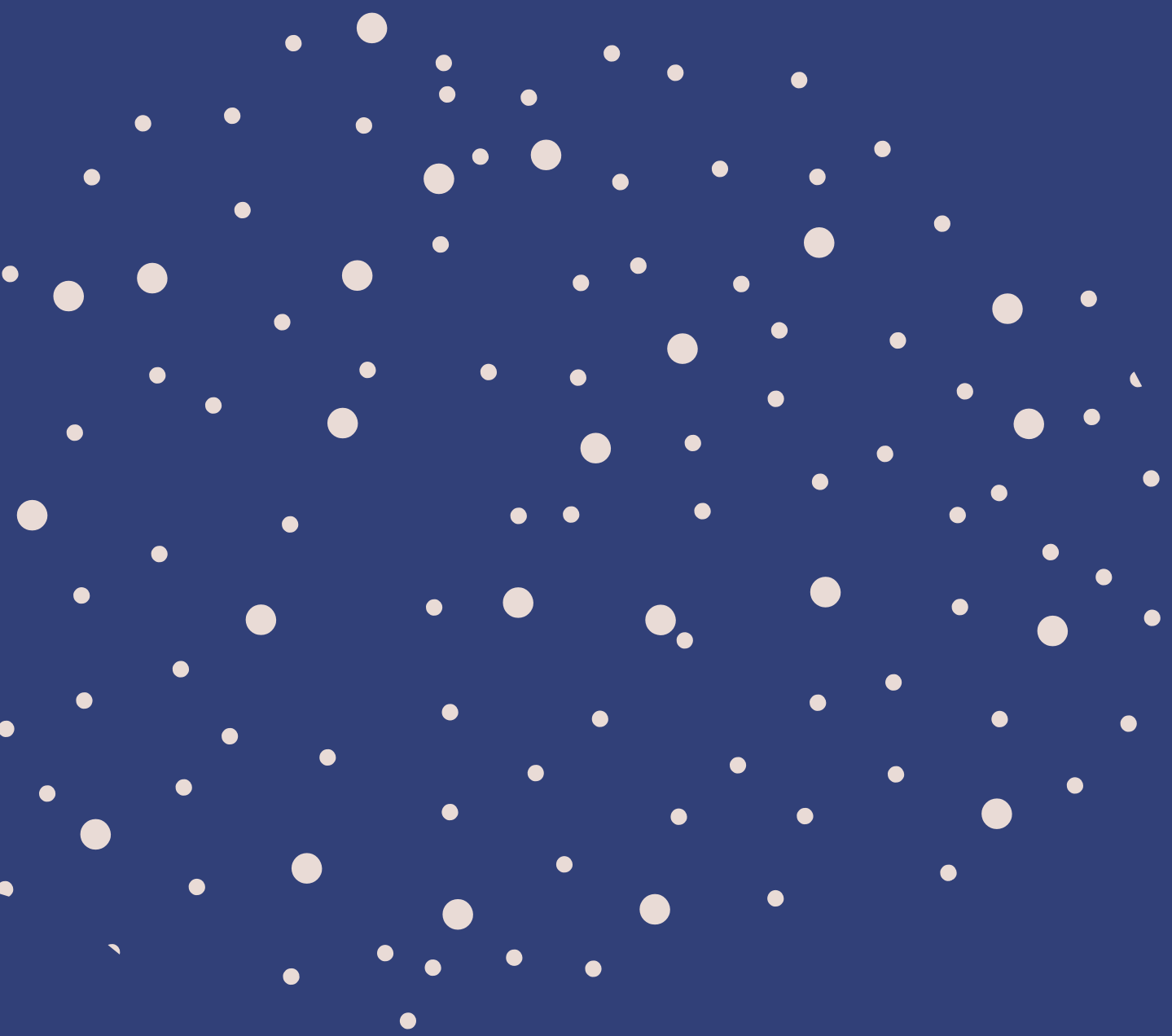


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Introduction



Introduction

This document summarizes the key milestones and the process of a year-long project using human-centered design (HCD) as a methodology to understand women’s experience of current contraception in Kenya and India.

As part of the project, ideation workshops were conducted in both countries. Findings from the research were presented to a multidisciplinary audience to generate future-facing ideas grounded in the realities of users.

The project was conducted by multiple partners:

FHI 360, a non-profit organization dedicated to improving lives in lasting ways by advancing integrated locally driven solutions;

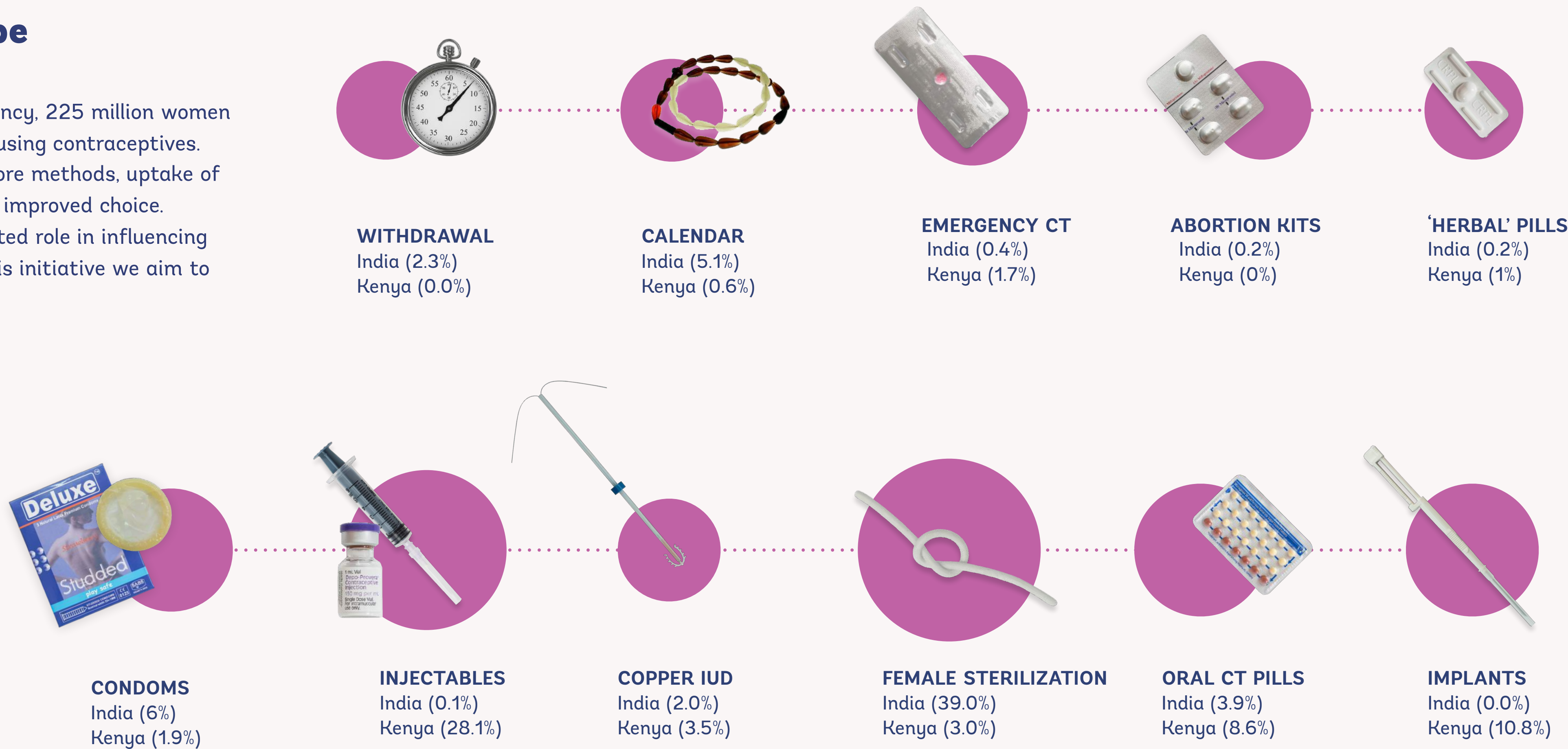
Quicksand, a design-thinking and innovation consultancy based in India and working across the global South;

Pabla van Heck, a freelance social intrapreneur who helps organizations navigate the fuzzy front end of social innovation for (women in) emerging markets.

This work was funded by **The Bill & Melinda Gates Foundation** whose goal is to give people the tools to lead healthy productive lives.

Method Landscape

Despite wishing to avoid pregnancy, 225 million women in developing countries are not using contraceptives. When women gain access to more methods, uptake of birth control increases owing to improved choice. Women’s voices have had a limited role in influencing contraceptive R&D, and with this initiative we aim to change that.



United Nations, Department of Economic and Social Affairs, Population Division (2015) - Trends in Contraceptive Use Worldwide 2015, NFHS 4

Leveraging human-centered design methodologies to facilitate insight-driven ideation, for generating new product ideas in women's contraceptive technology.

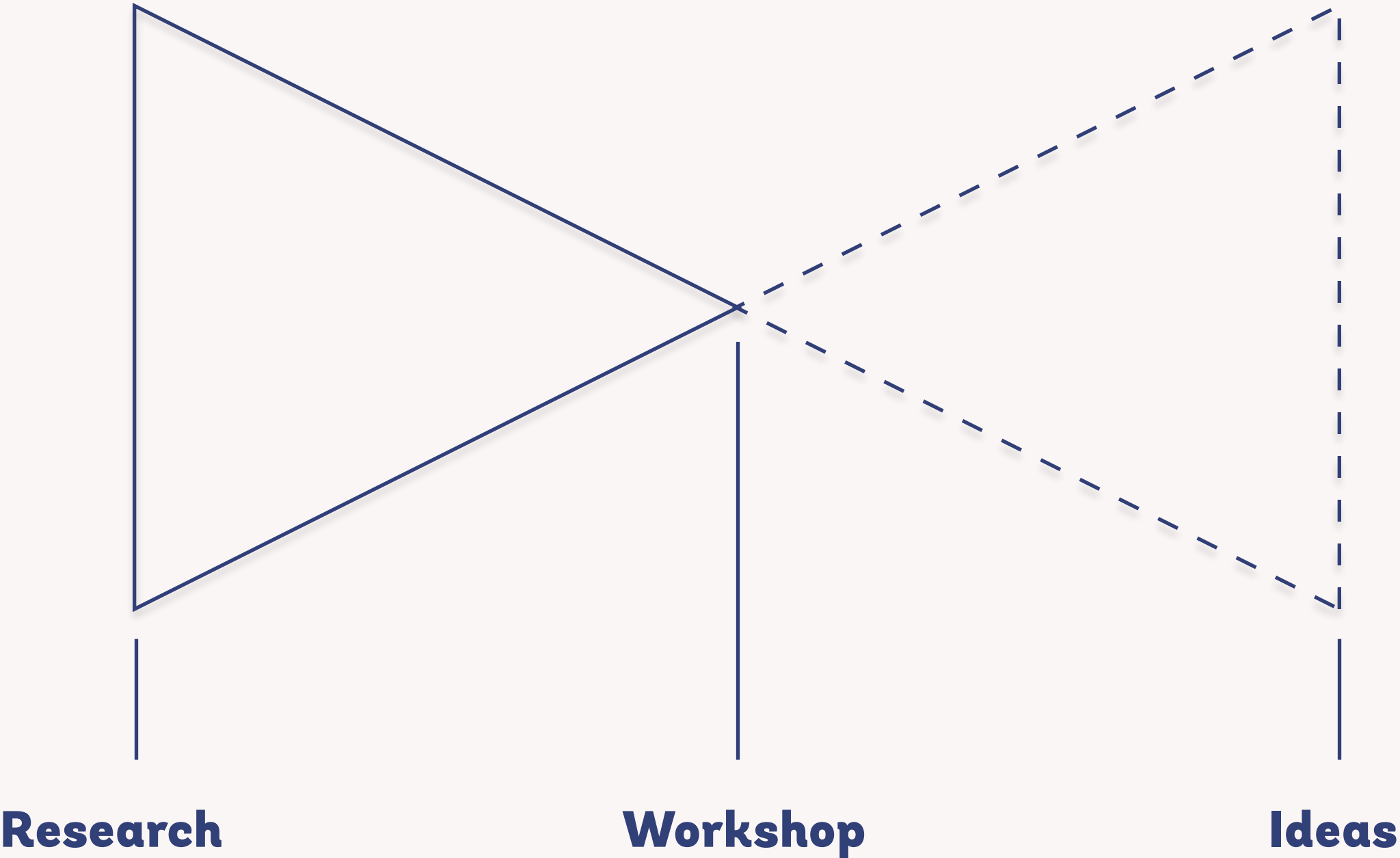
Why Kenya + India?

In seeking to develop new contraceptive technologies that address the needs of women in low-resource settings, the team aligned on Kenya and India as regional 'bellwethers' for (East) Africa and (South) Asia. Selection criteria included a number of factors ranging from economic access to cultural norms and healthcare provision. Kenya and India were strategically selected to generate insights that when compared and contrasted would help represent the broad needs of women in developing contexts and result in technologies that will resonate beyond geographic borders.

Kenya and India as regional 'bellwethers' for (East) Africa and (South) Asia.

Research -> Workshop

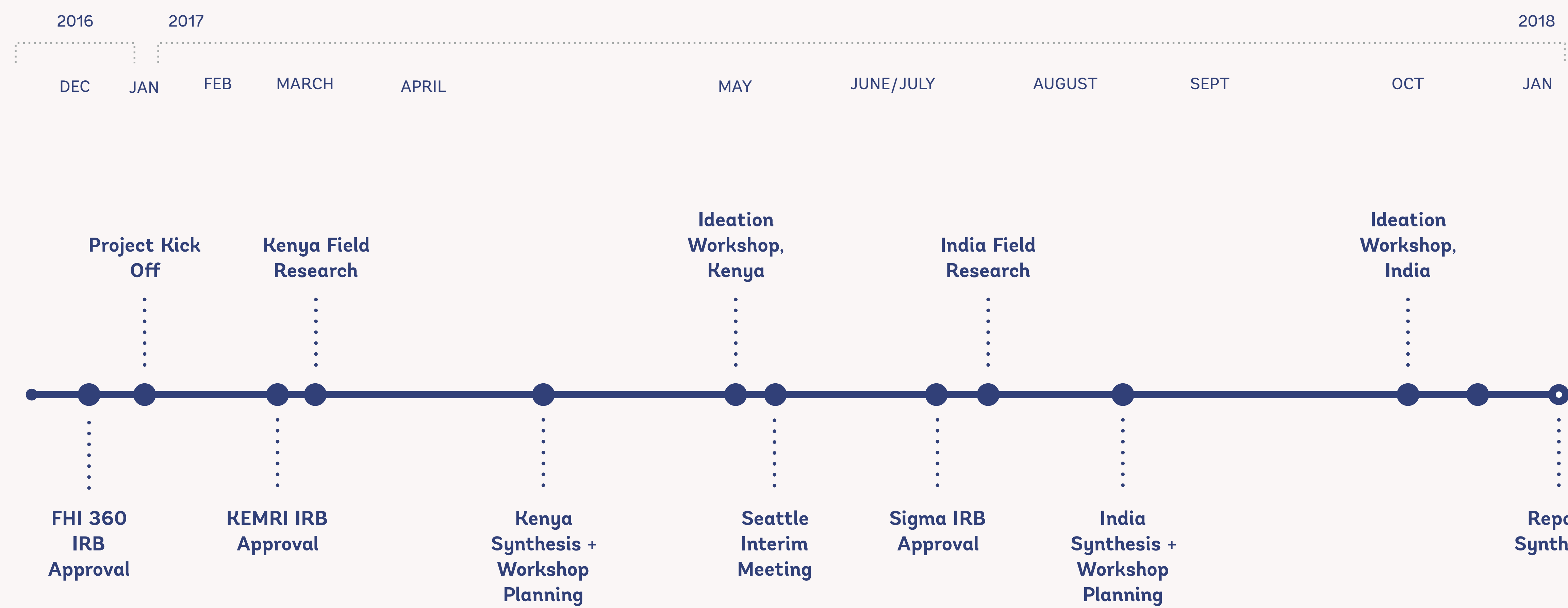
This program followed a simple structure carried out in both countries: an initial field research phase to arrive at user-centered insights, and a second phase, a week-long ideation workshop in which field insights were used to inform and ground idea creation.



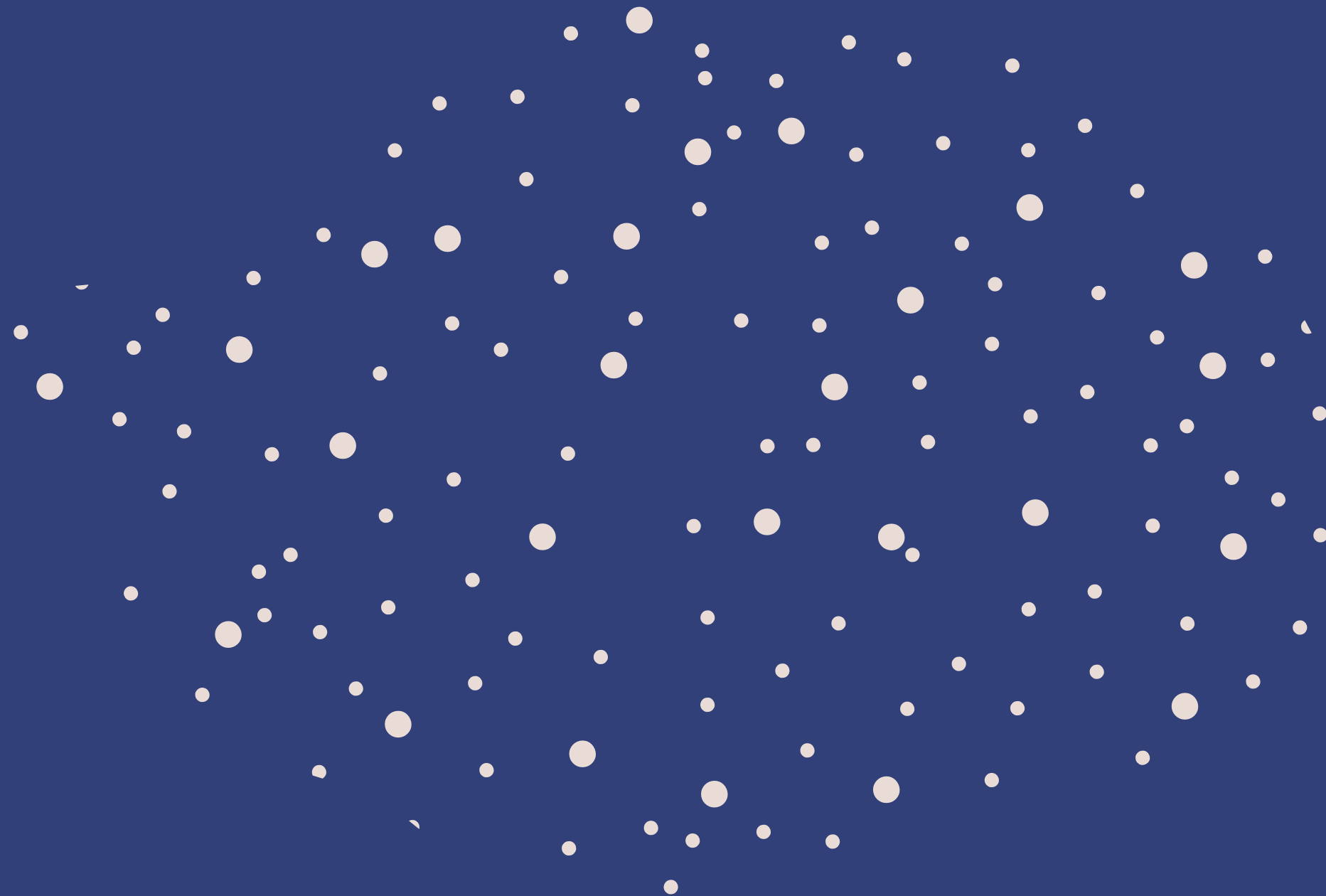
Scope and Constraints

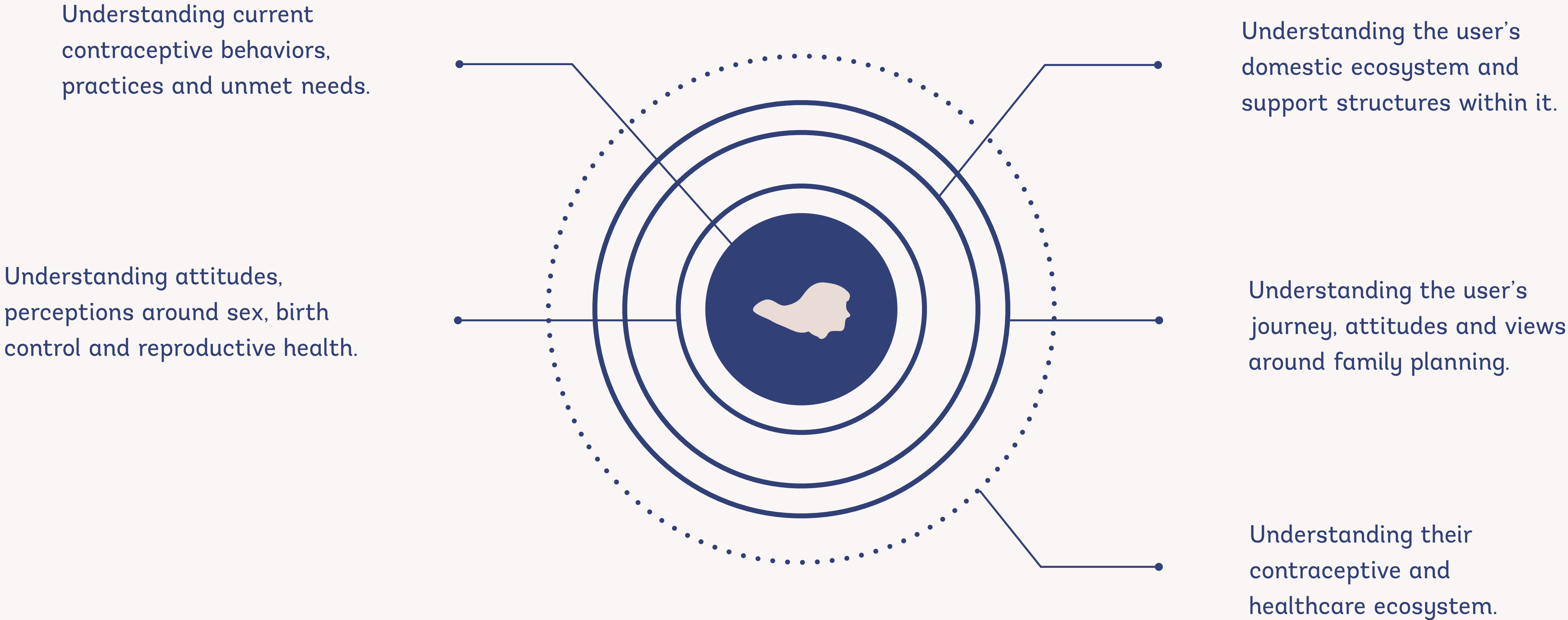
In order to find innovative ideas that built off current user needs but were also future focused, we set a few simple guidelines on how to conduct the research that would later influence idea creation. For one, we wanted to focus on ideas that would improve users' experience, encourage the uptake and use of contraception and still be relevant in a decade or two. Therefore, while current cost and access were not constraints, we nonetheless tried to meet women who had access to a variety of methods as well as women who had difficulty accessing methods. We also met non-users and discontinuers, along with those who were ahead of the curve in their contraceptive use.

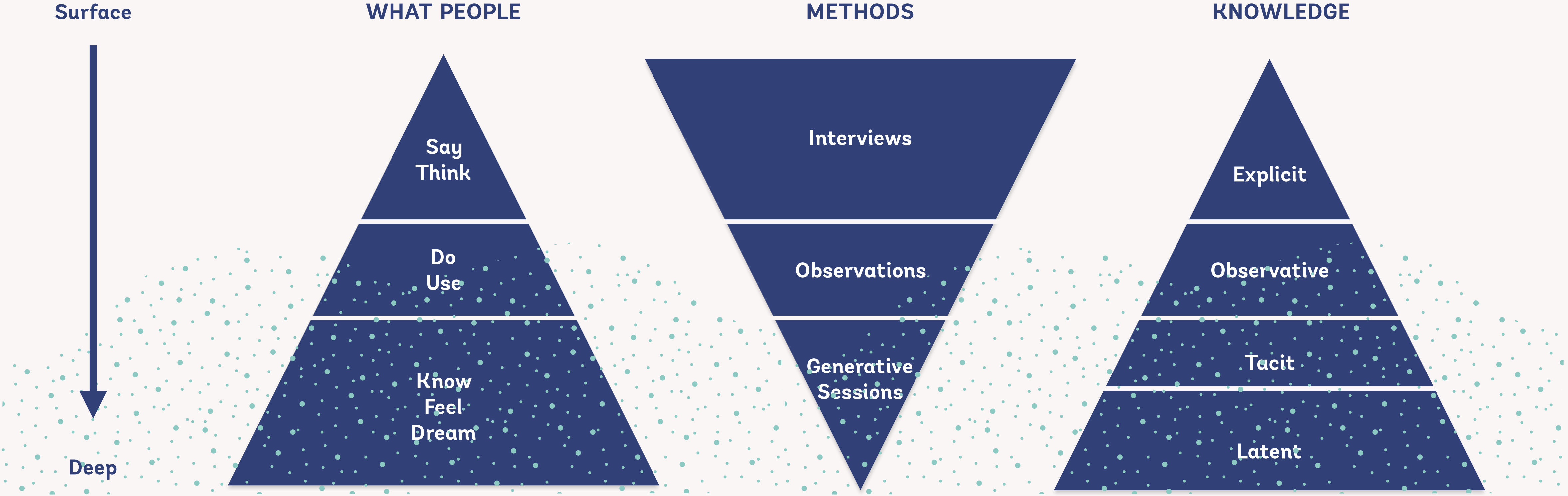




Research Approach







For a typical user interaction, the research toolkit would have different tools, techniques and methods to help elicit different kinds of information.

Image Source - Convivial Toolbox

Context Building

Upon kick-off we made ourselves familiar with existing content- this included online research of family planning programs, communication campaigns and recent reports such as the Demographic and Health Surveys (DHS) to get a better understanding of the context of the two countries.

This research allowed us to uncover some meta trends within the contraceptive landscape, which we used later to anchor our research. We were also able to highlight some factors early on that made these contexts unique, which allowed us to go further in our understanding during field research.



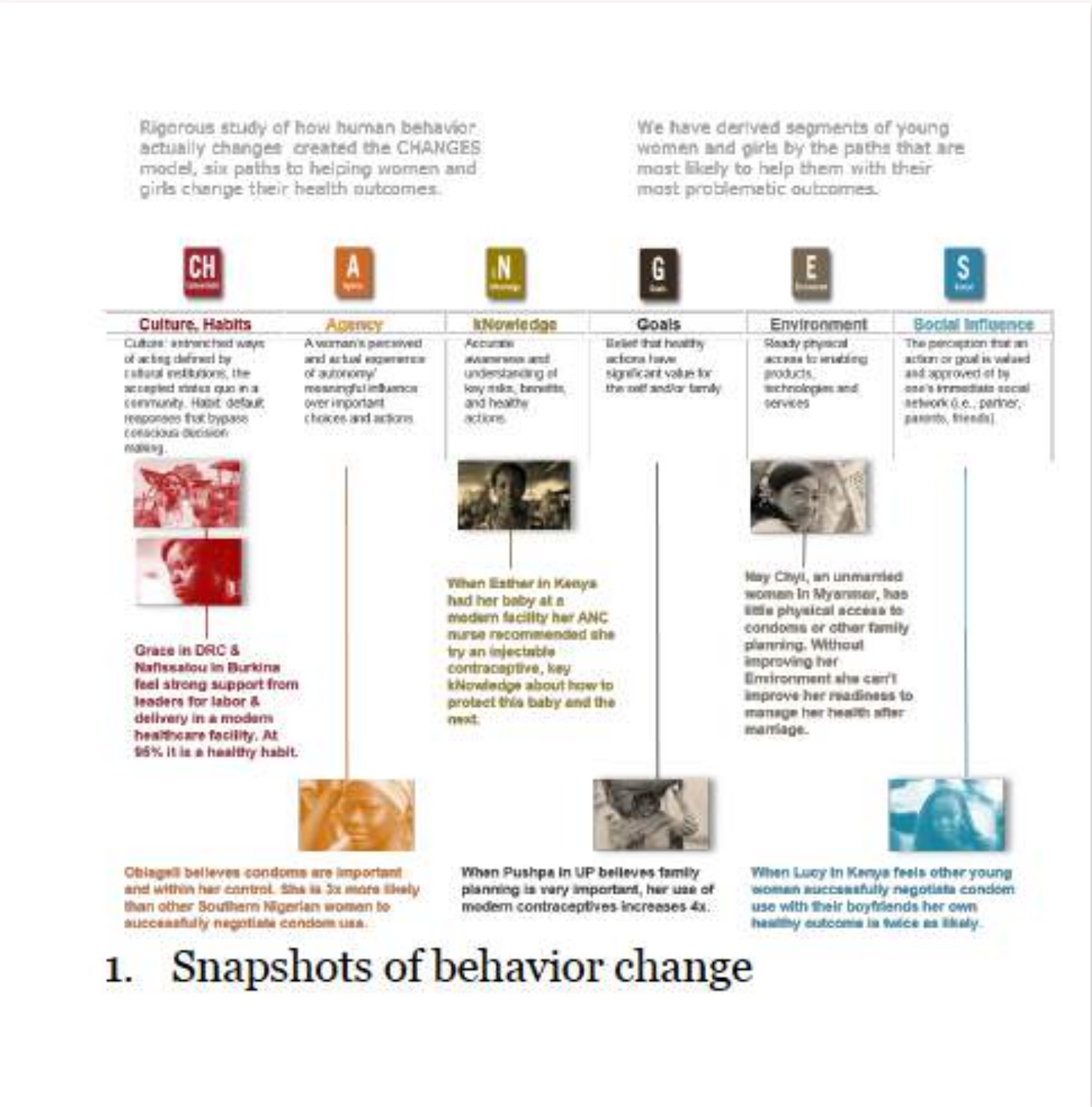
Existing Knowledge

Along with desk research, the team also spent time assimilating learnings from the existing knowledge base of our project partners. Two of these are noteworthy:

Choosing Health - Published by BMGF - this report introduces a framework for segmenting women and girls by their motivations and barriers for healthy sexual and reproductive behaviors;

Calliope - Created and maintained by FHI 360 - is a comprehensive database of the contraceptive technology pipeline.

Both of these resources, along with others, helped us take some confident steps in the early phases of the project when framing our research enquiries and methods.



CALLIOPE

kah-LY-ah-pee

The Contraceptive Pipeline Database

Welcome to Calliope, the Contraceptive Pipeline Database!

Learn about forthcoming and new contraceptive products from Calliope, the Contraceptive Pipeline Database. [Please complete our user survey.](#)

The [summary report](#) includes active, limited market approval, and SRA or WHO PQ approved products by target (male/female) and project phase.

Instructions ⓘ

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Products

Abstract

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Export products to Excel

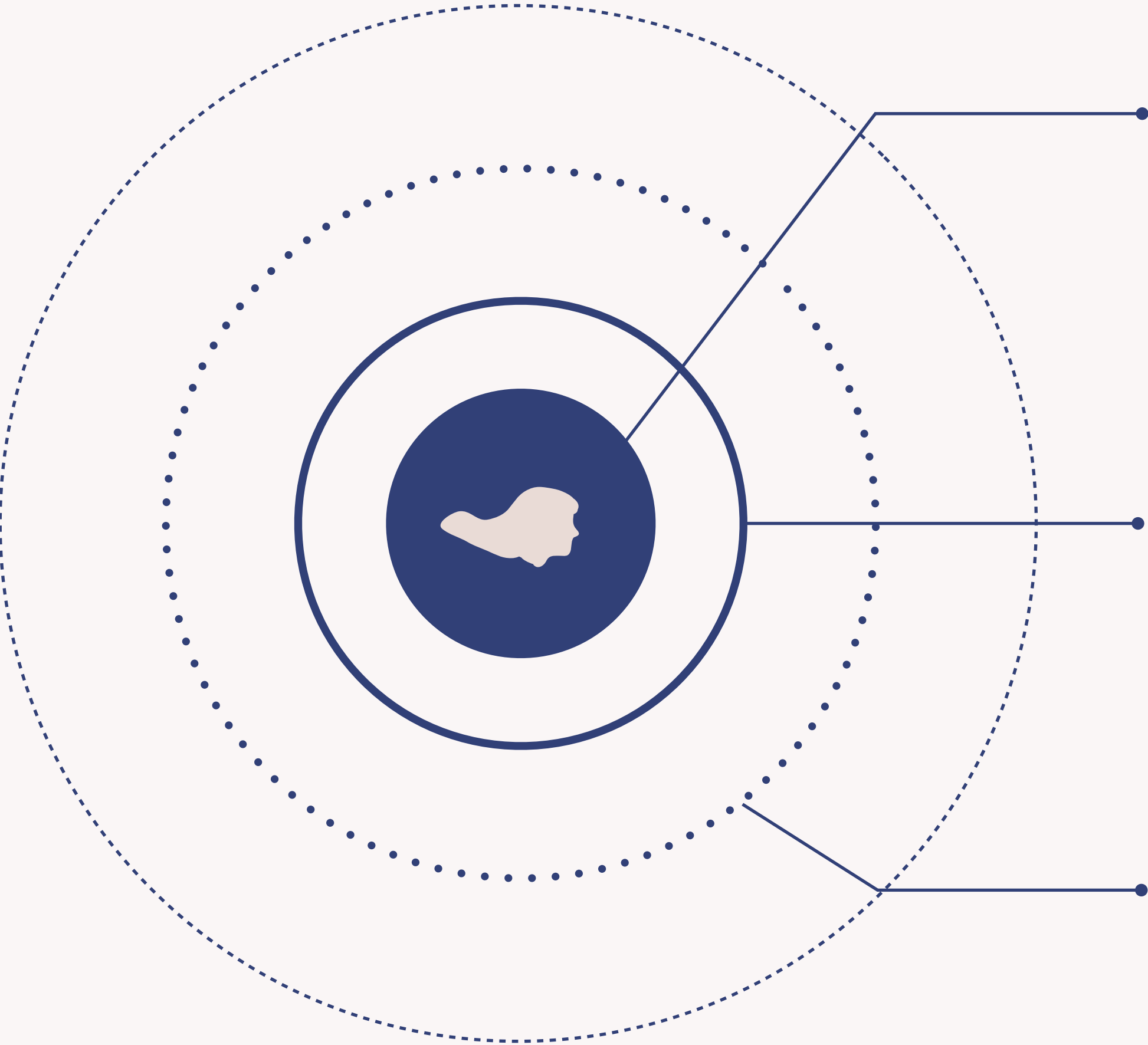
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11b-MNTDC / 11β/19/17β

Alternative Name: 11b-methyl-19-nortestosterone 17b-dodecylcarbonate (11b-MNTDC)
Development Status: [Active Development](#)
Target: [Male](#)
Mode: [Hormonal](#)
Delivery Type: [Injectable](#), [Oral](#)
Partner: [BIOQUAL, Inc.](#)

3-DRIUD

Development Status: [Active Development](#)
Target: [Female](#)
Mode: [Non-hormonal](#)



Who did we research?

WOMEN (Age 16 and upwards)

Spanning **users, non-users and discontinuers of contraceptive technology**, across various types of demographic profiles, primarily in lower socio-economic segments.

ECOSYSTEM OF INFLUENCERS

Spanning **social** (family, relatives, friends, co-workers); **cultural** (community heads, spiritual leaders, markets); **institutional** (teachers, family planning clinics); **health** (health centers, pharmacists, midwives) and related influencers in their immediate ecosystem.

CONTRACEPTIVE VALUE CHAIN

Macro ecosystem of providers who contribute to last mile delivery of contraceptive technology, communication and support systems - from **women empowerment programs; family planning and contraceptive health agencies**; to different **supply chains** (clinics, pharmacies).



Younger women
(16-24 yrs*)



Women in the midst of
family planning
(25-34 yrs*)



Women limiting their
family size
(35-50 yrs)

* Some of these age ranges applicable to Kenya were revisited for the India research. Also, under the research protocols in India, we could only speak with women under the age of 18 if they were married.

	Traditional Qualitative Socio-Behavioral Research	Human-Centered Design Research
Overall Objective	Generate information and theories about behaviors that can be used to inform design or intervention goals	Arrive at new solutions based on immersive experience of end-user & context
Recruitment	Priority on defining participant categories to ensure data saturation	Priority on identifying a wide range of experiences through the use of rapid flexible processes
Proximity to Field	Immersion by researchers often “behind the scenes” to reduce participant “reactivity”	Immersion by multidisciplinary research team, allowing for immediate feedback
Data Capture	Audio-recordings and verbatim transcriptions preferred	Field notes and rich media assets preferred
Synthesis of Findings	Step-by-step “auditable” process, with emphasis on scientific rigor	Rapid and iterative review of data to generate creative insights
Outputs & Dissemination	Text to convey the content with dissemination in peer-reviewed journals and other formats	Rich media collateral and a toolkit of assets that facilitate empathetic ideation

Learnings from doing research in this space (and working in this space while doing research)

Employing a human-centered design (HCD) approach in contraceptive technology research, an area that is typically explored using traditional socio-behavioral (TSB) research methodologies, was not without its challenges. Seeking institutional reviews and ensuring all participants were made aware of the project's aims, methods and intent prior to participation were at times at odds with the fast, flexible and iterative nature of the HCD process. The systematic review and painstaking audit trail generated during TSB research was not always possible given the rapid and embodied nature of HCD, which hinges on the firsthand experience of researchers, real-time/concurrent analysis and detailed field notes in lieu of coded transcripts.

What our process ultimately achieved was a synergistic hybrid of the two approaches, enabling agile responses to realities encountered in the field and the use of creative elicitation techniques, while retaining some of the rigor, ethics and transparency that are hallmarks of TSB. Moreover, for the purposes of ideation, it was critical that user insights were generated, communicated and presented in a manner that had maximum impact on the individuals tasked with ideating. This would not have been possible with a TSB-only approach, the outputs of which tend to be long-form, text-heavy documents that emphasize process and do not adequately engender the empathy made possible by the rich media assets associated with HCD.



Ethics and Consent

The sensitive nature of the research, particularly in the countries and contexts where primary research was conducted, mandated a flexible approach that ensured participant privacy and comfort. The research team endeavored to provide as much detail as possible in advance of interviews and observations as well as at debriefs following sessions to provide any clarifications participants may have sought.



Ethics and Consent

IRB Approvals – To conduct research in Kenya and India, we sought both FHI and local Institutional Review Board (IRB) approvals (e.g., FHI - OIRE, Kenya - KEMRI and India - Sigma) to ensure our approach met local guidelines for the protection of respondents.

In India, the IRB strictly limited our use of identifiable participant imagery to the ideation workshop. As a result, neither this report nor any other materials disseminated outside of the ideation workshops contain photographs of the actual participants we met in India.

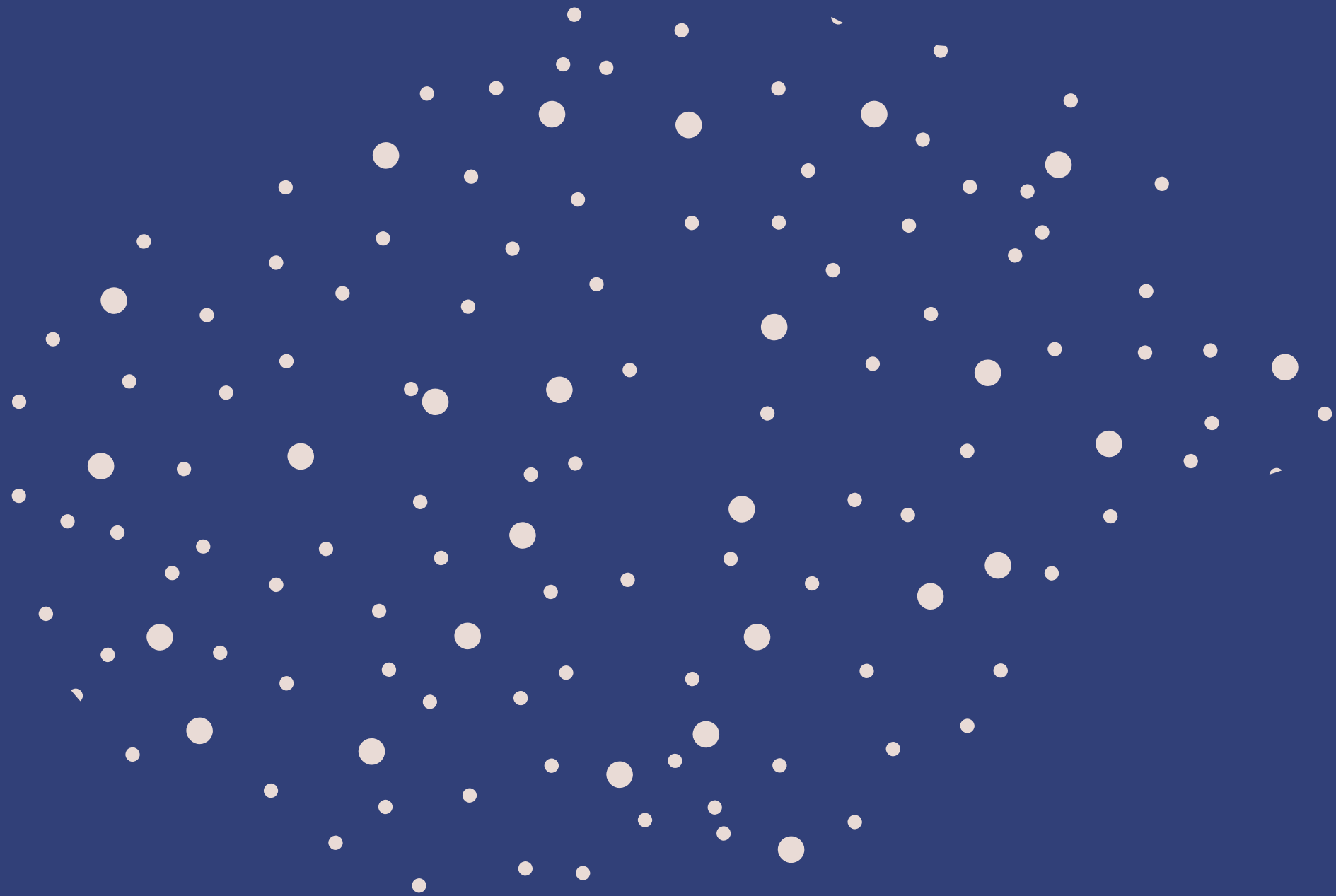
Ethics Training – Prior to the research, our team of international and local researchers underwent research ethics training and certification.

Consent Process – Before each interview and focus group we made sure that we allocated enough time to walk respondents through the consent forms and ensure signed permission. This helped orient respondents to the research, engender trust and empower the respondents to opt out at any point.

For many respondents the research was a positive experience, and they were happy to participate. There was a sense of contributing to something greater than themselves and an opportunity to further women’s empowerment.

All photographs used in this report are anonymized and are of users who have given full consent or are of other representative users who were not part of our research.

Field Research



Research Teams

As with any formative qualitative research engagement, it was key for the initiative to harness and capitalize on the contextual knowledge possessed by local communities in as active a manner as possible. Accordingly, research assistants and field coordinators were included in the field teams along with user-centered design practitioners from Quicksand and technical experts from FHI 360. This multidisciplinary approach helped to ensure that a wide variety of perspectives were brought to bear on the research activities.

RA Training Session

The Research Assistant (RA) training kicked off in Kenya and continued in earnest throughout the team's time in-country as well as in India for the following research phase. All of the individuals tasked with conducting research received ethics training as well as sessions on asking open-ended questions, potential effects and breaches, participant well-being, orientation to research processes, working in a team setting, and considerations around appropriate media documentation.

12

Local Research Assistants

04

Behavioral Researchers

03

Local Field Coordinators

04

User-centered Designers



In **Kenya**, we conducted research in **Nairobi**, **Nakuru** and **Kisumu**. In **India**, the locations included **New Delhi** along with **Kolkata** and **Shantiniketan in West Bengal**.

In both the countries, the locations were picked to allow us access to a range of contexts - across factors such as city size, development stages, occupations, access to healthcare and cultural practices. Nairobi and Delhi, for example, were picked for the big city perspective, whereas Kisumu and Shantiniketan are smaller towns that gave us access to people from rural areas.

Outreach to local organizations for recruitment and leads

The team capitalized on the experiences of other local organizations working in the areas where research was being conducted. This greatly aided in accelerating the acclimation process at locations as well as in identifying salient research participants.



Larger respondent ecosystem

For this project, we did not just meet women across the spectrum from menstruation to menopause. It was instrumental for us to also interview partners, influential community members (e.g., friends, neighbors, coworkers, etc.) and institutional stakeholders (e.g., doctors, nurses, pharmacists, etc.).

Urban / Peri urban / Rural

Other than engaging a variety of stakeholders, the team also conducted the research across a range of settings. The daily realities of residents in urban, peri-urban and rural environments were investigated in order to better understand how income sources, quality of healthcare and other dynamics of women's lives impacted their contraceptive decision-making process.



*Younger Women > Age 16-24**
Women in the midst of family planning > Age 25-34
Women limiting their family size > Age 35-50

Who Did We Research?

Our research primarily focused on women whose needs were not fulfilled by the current portfolio of contraceptive technologies. We also spoke to many women who were already informed about family planning and had agency over their contraceptive use, as a way to get a glimpse into the future.

In addition to end users we also met people from their families, as well as partners and healthcare providers for their perspectives.

KENYA

29



In-depth Interviews

104 in 25 groups



Focus Group Discussions

22



Stakeholder Interviews

31



Intercepts

INDIA

27



96 in 22 groups



29



20



Research Protocols and Tools

Prior to research, we crafted some research tools that would help us facilitate discussions during the various types of research sessions.

In the following slides we have listed the main research formats and tools we used.

3.

Where in the body is it used?

शरीर में कहा पे इसका प्रयोग किया जाता है ?

শরীরের কোথায় এটি ব্যবহৃত হয় ?

9.

How do you know it is working?

आप कैसे जानते हैं कि यह काम कर रहा है ?

এটা কাজ করছে তা আপনি কিভাবে জানেন ?

8.

Who can know you're using it?

कौन जानेगा कि आप इसका उपयोग कर रहे हैं ?

কে জানবে আপনি এটি ব্যবহার করছেন ?

1.

How long does it work?

2.

How is it delivered

यह कैसे दिया जाता है ?

এটা কিভাবে বিতরণ করা হয় ?


6.

What else should it do?

इसे और क्या करना चाहिए?


কি এটা করা উচিত?

6. What else should it do?



It enhances my sexual drive

6. What else should it do?



It gives me energy

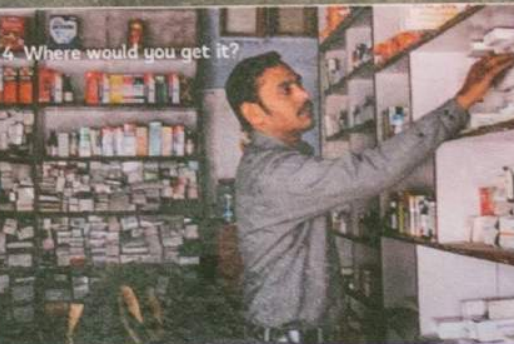
7.

How do you find out about it?

आप इसके बारे में कैसे पता लगा सकते हैं ?

আপনি এটি সম্পর্কে কিভাবে বুঝে পড়ত পারেন ?

4. Where would you get it?



At a Chemist

7. How do you find out about it?



TV or Radio

4. Where would you get it?



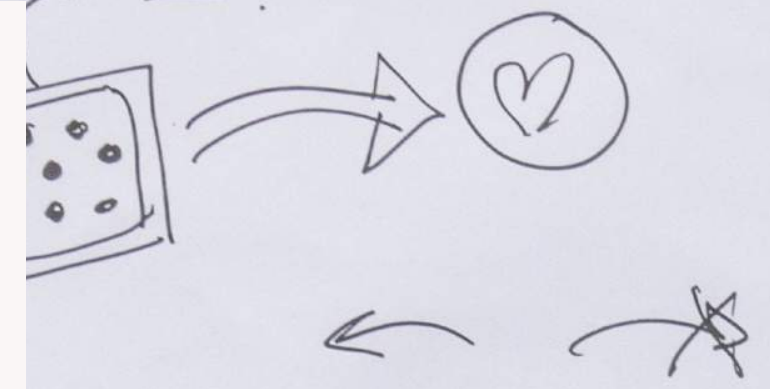
At a Cosmetic Store

7. How do you find out about it?



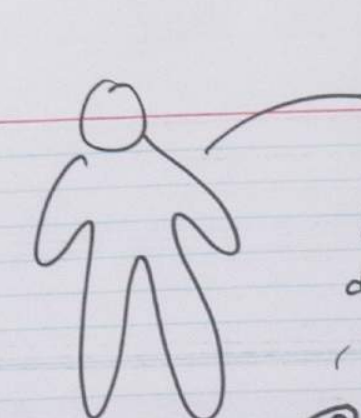
Health provider

1 month



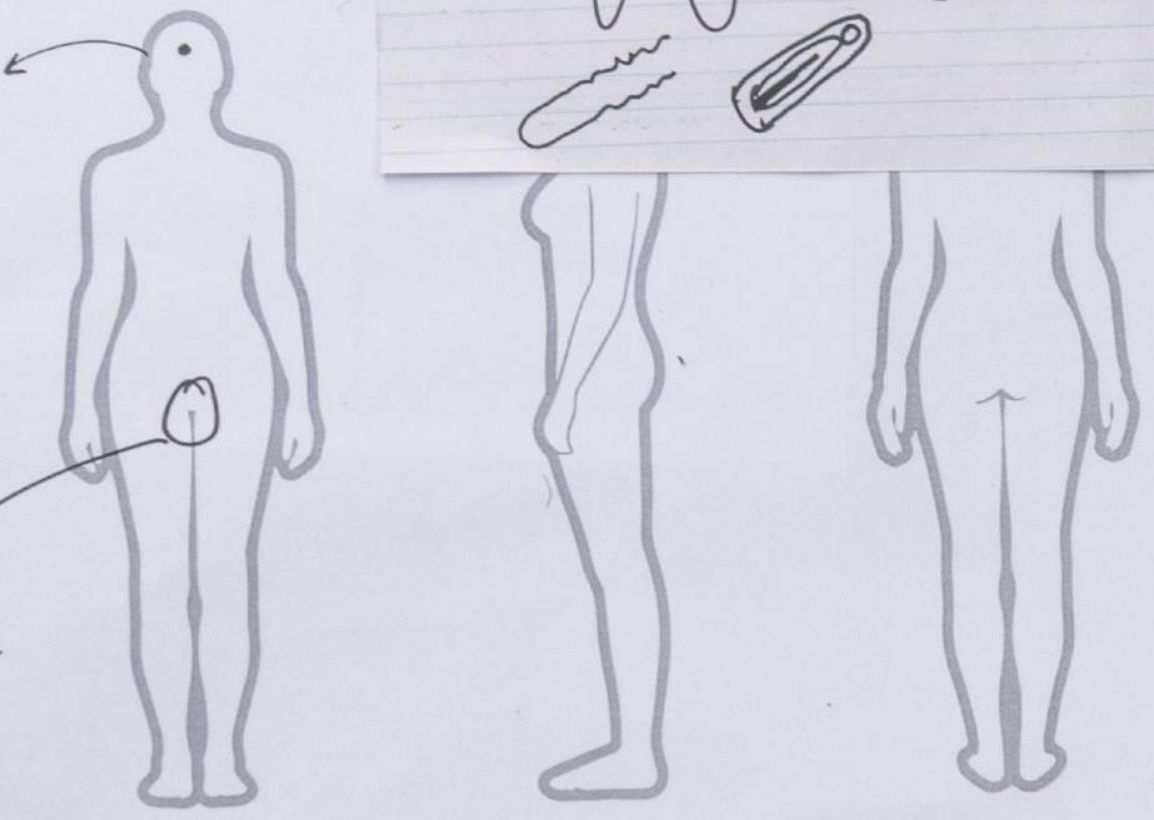
kneess

সহেলী



something I
doesn't harm
body at all.

Dimaag
palakhe
ke liye.



removing
pain

Front

Side

Back



In-home Interviews

One-on-one discussions with women about their experience using contraception



Focus Group Discussions

Group discussions on contraceptive use and ideal products



Context Visits

Context visits to gain a better understanding of the environments within which women live, work and access health and family planning services

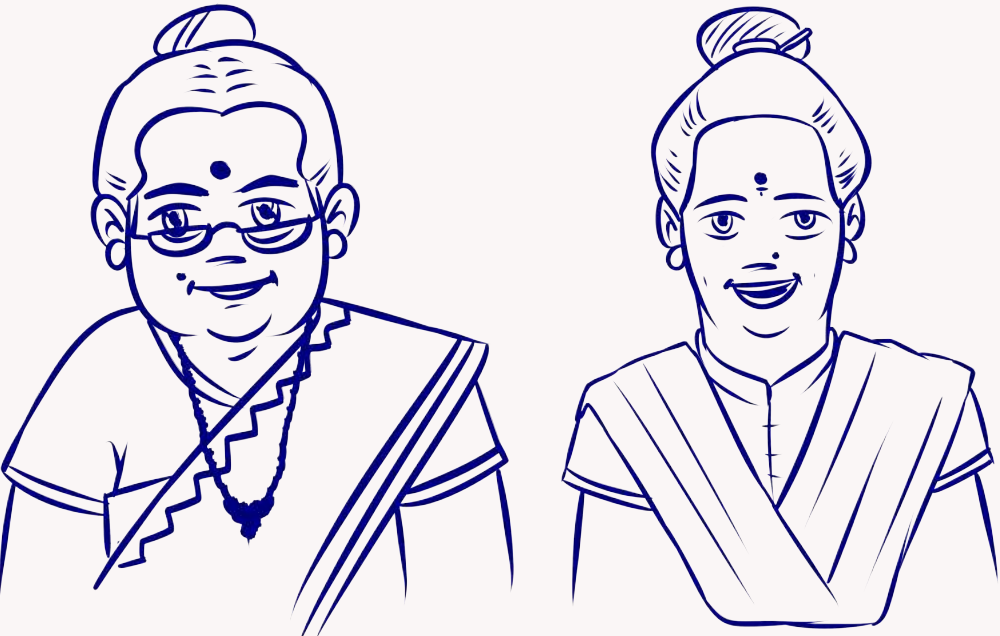


Intercepts

Intercepts or brief interactions with different members of the communities we visited to get a sense of prevalent social and cultural norms and practices

Morning

Afternoon



Separate in-depth interviews with the school principal, a teacher and two school girls



Intercepts with school girls and boys, neighborhood pharmacists and “chip” shop vendors



Contextual observations outside of school and surroundings, observations of youth groups



A focus group with school girls after school.



In-depth interviews

In-depth interviews provided insights into the everyday lives of women and how contraceptive(CT) use could come to impact them and their communities. We prepared various card decks to facilitate the discussions; some were about identifying values and acceptable trade-offs and others attempted to create proxies to make the discussion less personal but that would still give valuable insights around women’s preferences and experiences with CT.

TOOLS USED

- Influencers cards
- Situation storyboards
- New concept stimuli
- Aspiration cards
- Timeline exercise





INFLUENCERS CARDS

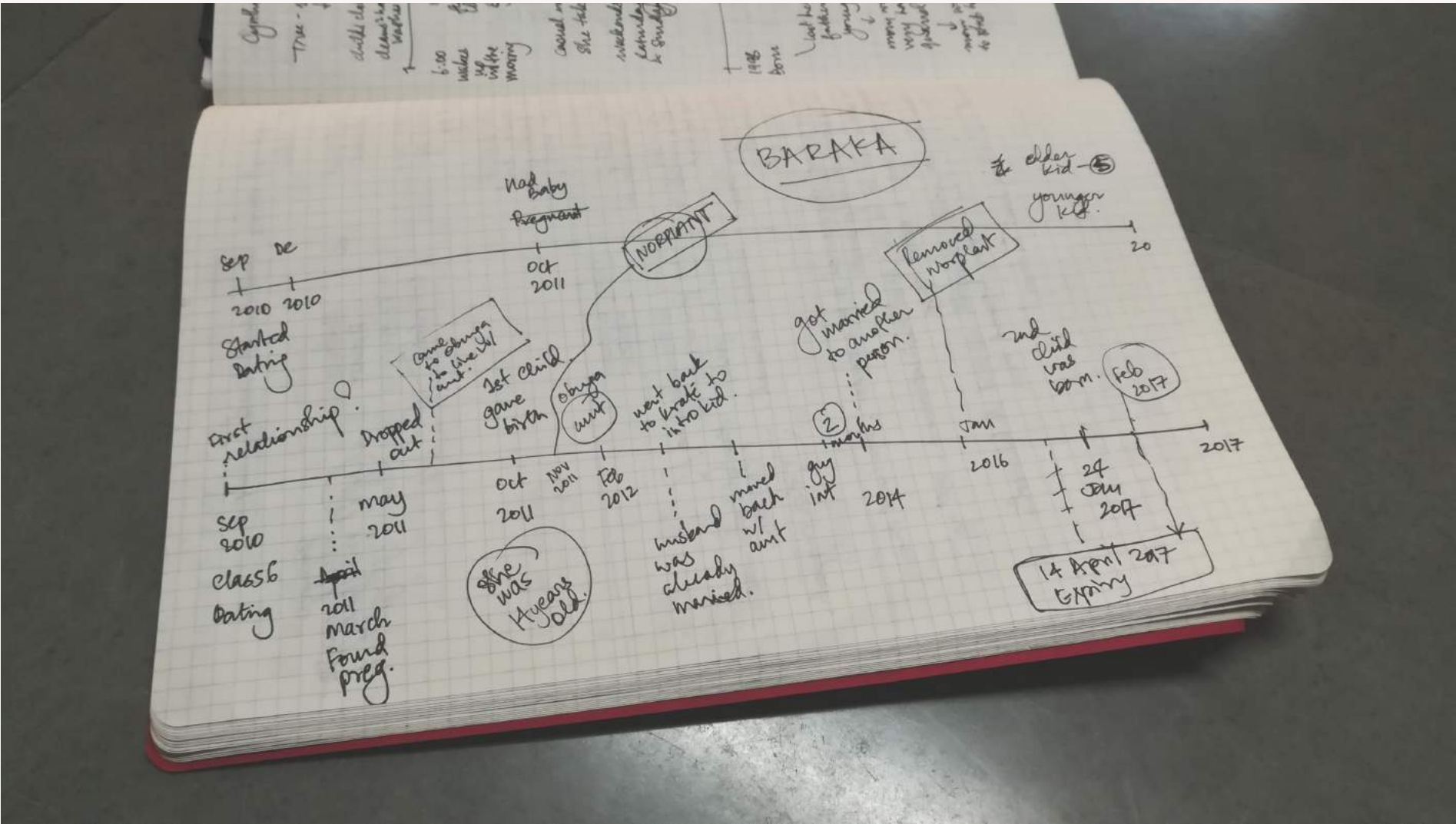
Illustrated influencer cards, composed of different (primary, secondary and tertiary) influencers from the users’ context to understand how women we spoke to made decisions, and who influenced them.

For India, we updated the deck, changing the illustrations as well as some of the potential influencers based on our secondary research.



ASPIRATION CARDS

Aspiration cards were used to better understand the ways in which respondents prioritized their needs for the future. These were an illustrated set of cards with different objects and scenarios that users may wish to have. It helped start conversations around what they valued and aspired for individually as well as for their families, and what they were doing to achieve these dreams.



TIMELINE EXERCISE

The purpose of this activity was to aid our conversation with the respondent about their reproductive journey from menstruation to menopause. Starting with a broad timeline we managed to add more richness to the timeline as the interview progressed. Having a timeline in front of the respondent greatly helped both the interviewer and respondent to identify key inflection points, gaps and specific aspects for further discussion.



SITUATION STORYBOARDS

Situation-based scenarios around sensitive topics such as sex, marriage, relationships and family planning were presented to help users articulate their mental models through fictionalized characters. These were especially useful when talking to adolescents and younger women who felt uncomfortable discussing sexuality and reproduction.

These differed between Kenya and India depending on topics that were found to be sensitive or difficult to broach in both contexts, based on secondary research, expert opinions and iterations following some preliminary fieldwork.



Focus Group Discussions

Focus group discussions were used to gather information about societal perceptions, practices and collective beliefs around community life, health as well as family planning. Tools such as image association cards, future scenarios, contraceptive library and make your ideal CT cards helped facilitate conversations around awareness, experiences and needs around contraception.

TOOLS USED

- Influencers cards
- Situation storyboards
- New concept stimuli
- Aspiration cards



IMAGE ASSOCIATION CARDS

Different sets of cards (nature / emotions / abstract) to aid conversations, especially when diving into embedded notions or abstract emotions around CT use, family planning, users' lives, etc. These were used as ice breakers to understand the users' perceptions of themselves, their CT experiences and their ideal methods.

The images used were different for Kenya and India in order to fit the contexts so that respondents were able to relate to them more easily. This also gave us a sense of pre-existing notions around certain settings, animals and emotions that gave some insight into the respective societies.



Context Visits

Context visits to hospitals, clinics and everyday settings allowed us a better understanding of the environments within which women live, work and access health and family planning services. Interacting with providers helped us understand their perceptions, biases and limitations with regard to the services they offer. In some situations, we were able to use tools like the Make Your Ideal CT and Future CT Scenario Storyboards to better facilitate these conversations.

TOOLS USED

Make your ideal CT
Future CT scenarios



- It should be white in colour.
- It should have lavender fresh Scent.
- It should be attractive and well covered.
- It should favour all ladies. (No negative side effects)
- It should have a heart shape.
- It should cost between sh.20- sh. 30.

MAKE YOUR IDEAL CT CARDS

These were a set of cards with features of contraceptive methods to allow respondents to create an ideal method for themselves and to help us understand unmet needs and features that women desire from a method.

These acted as a vital tool to facilitate conversations around what women felt were missing in the current products. While it worked very well with those more familiar with contraceptive use, it was difficult to navigate for women with lower awareness and use experience.



FUTURE CT SCENARIO STORYBOARDS

Storyboard scenarios around new ‘fictional’ contraceptive technologies were created to evoke user discussions and contextualize their unmet needs.

These became a way to segue into conversations around what respondents felt was lacking in currently available methods as well as to get their inputs on what they desire from contraceptive methods in terms of how they are delivered, where they can be accessed, how long they last, etc.

Intercepts

Intercepts or brief interactions with different members of the communities we visited were used to get a basic sense of the workings of the society. While not focused on issues of family planning or contraceptive use, these helped us understand societal perceptions around issues such as gender roles, healthcare, daily rituals as well as the day-to-day life of the community.

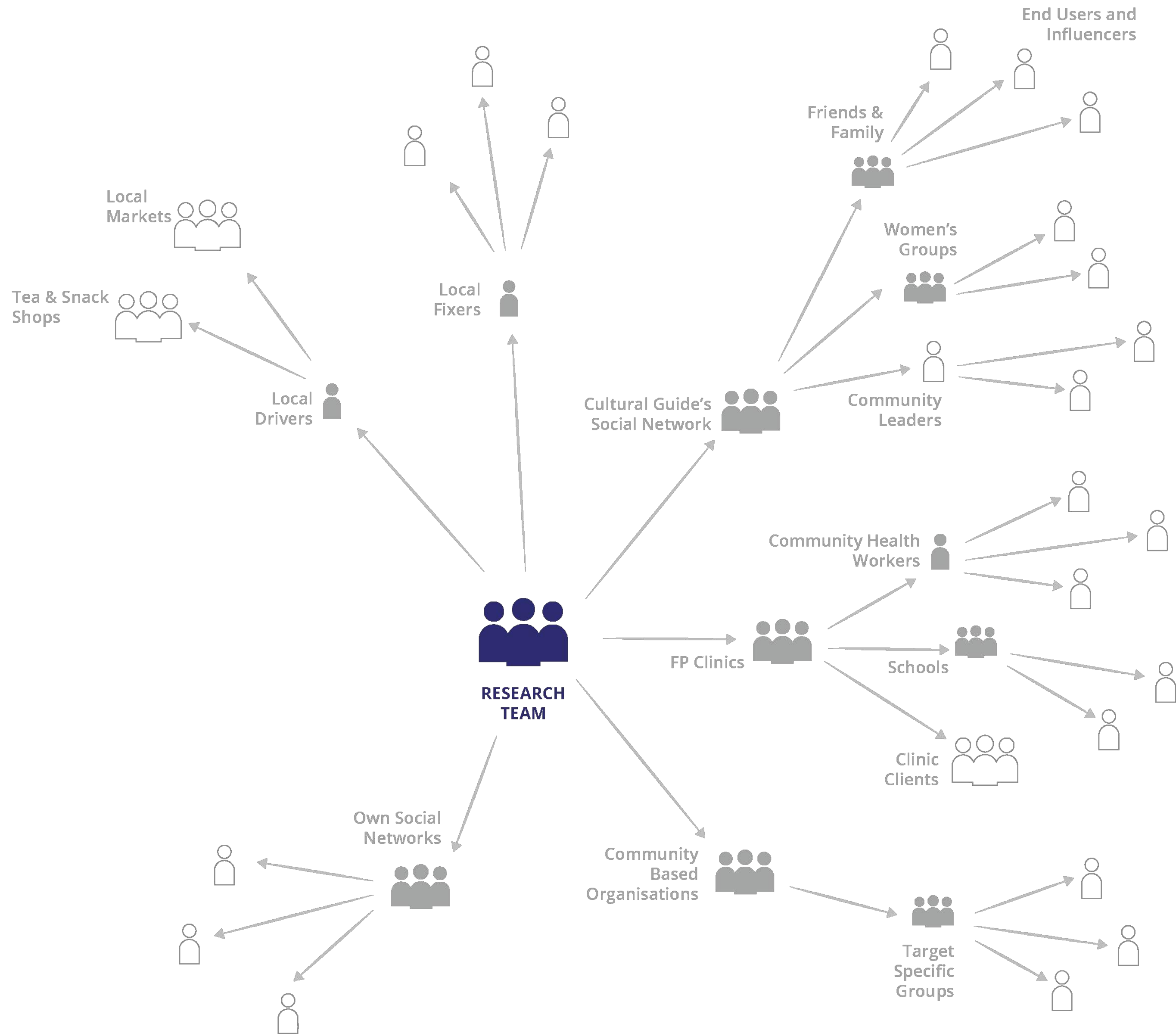
TOOLS USED

Snowball sampling



SNOWBALL SAMPLING

Conducted informally, the snowballing process gave us access to unique point of views from people we met in the field who might have been hard to reach or recruit otherwise. Some of the intercepts conducted using this method resulted in in-depth discussions.



Synthesis

The synthesis took place in multiple parts, one happening in the field after interviews and through daily debriefs while the second happened in a larger multidisciplinary group of researchers and designers during which observations were grouped and consolidated via affinity mapping into tangible insights,

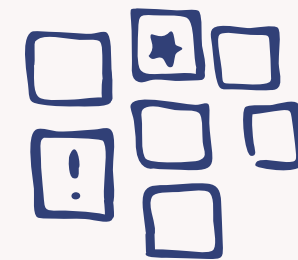
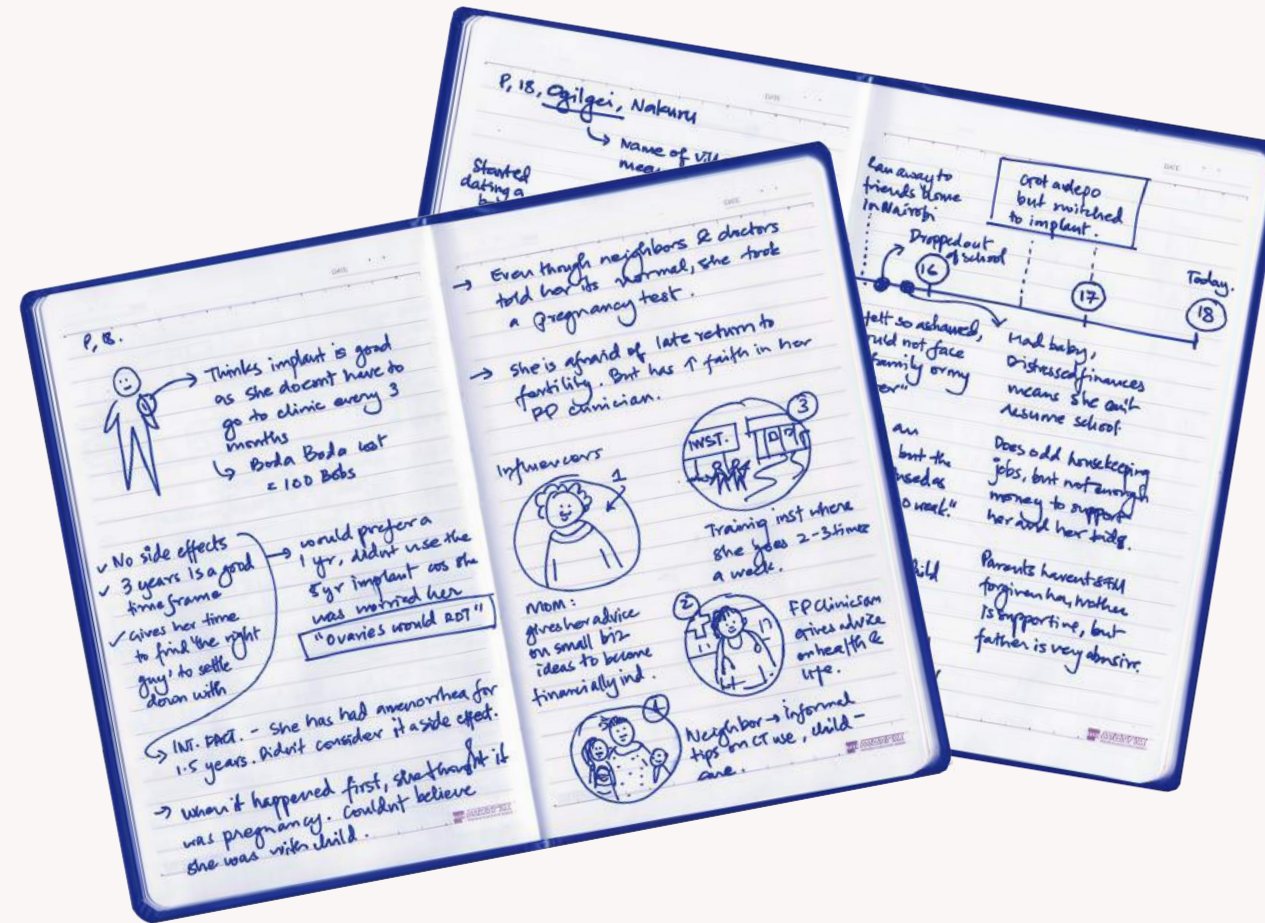
TOOLS USED

- Audio-recordings
- Note cross-referencing matrix
- Affinity mapping





Note-taking during in-depth interviews and focus group discussions



Expanded notes and matrices that capture team members' notes on each interview, intercept and focus group discussion.



Meeting together at the end of the day to discuss and capture key findings. These team debriefs were a critical aspect of data collection.

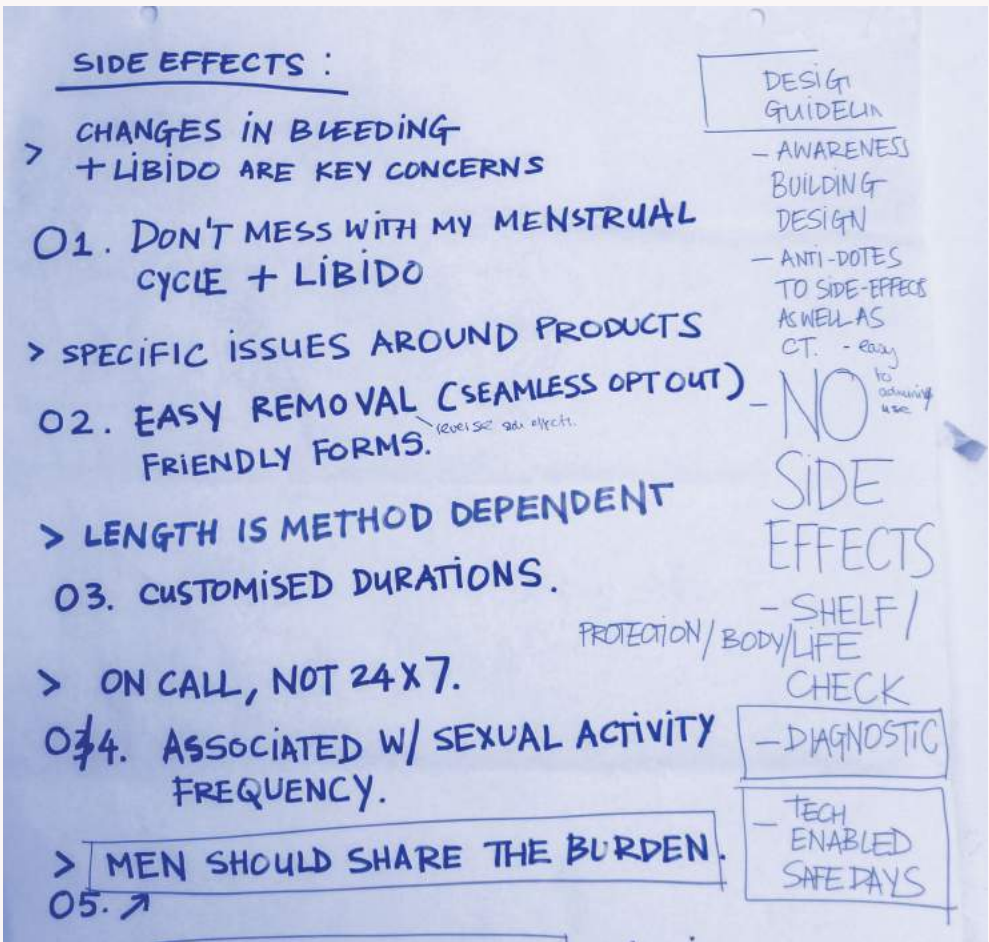
[illegible]



Daily debriefs and en-route downloads among members of the larger team to expand notes and distill formative insights across the three groups.



Interim synthesis to refine research protocols and cross-reference emerging insights across target groups.



End synthesis to arrive at high-level insights, personas and opportunity areas.



Workshops to refine and represent field data into ideation workshop stimuli.



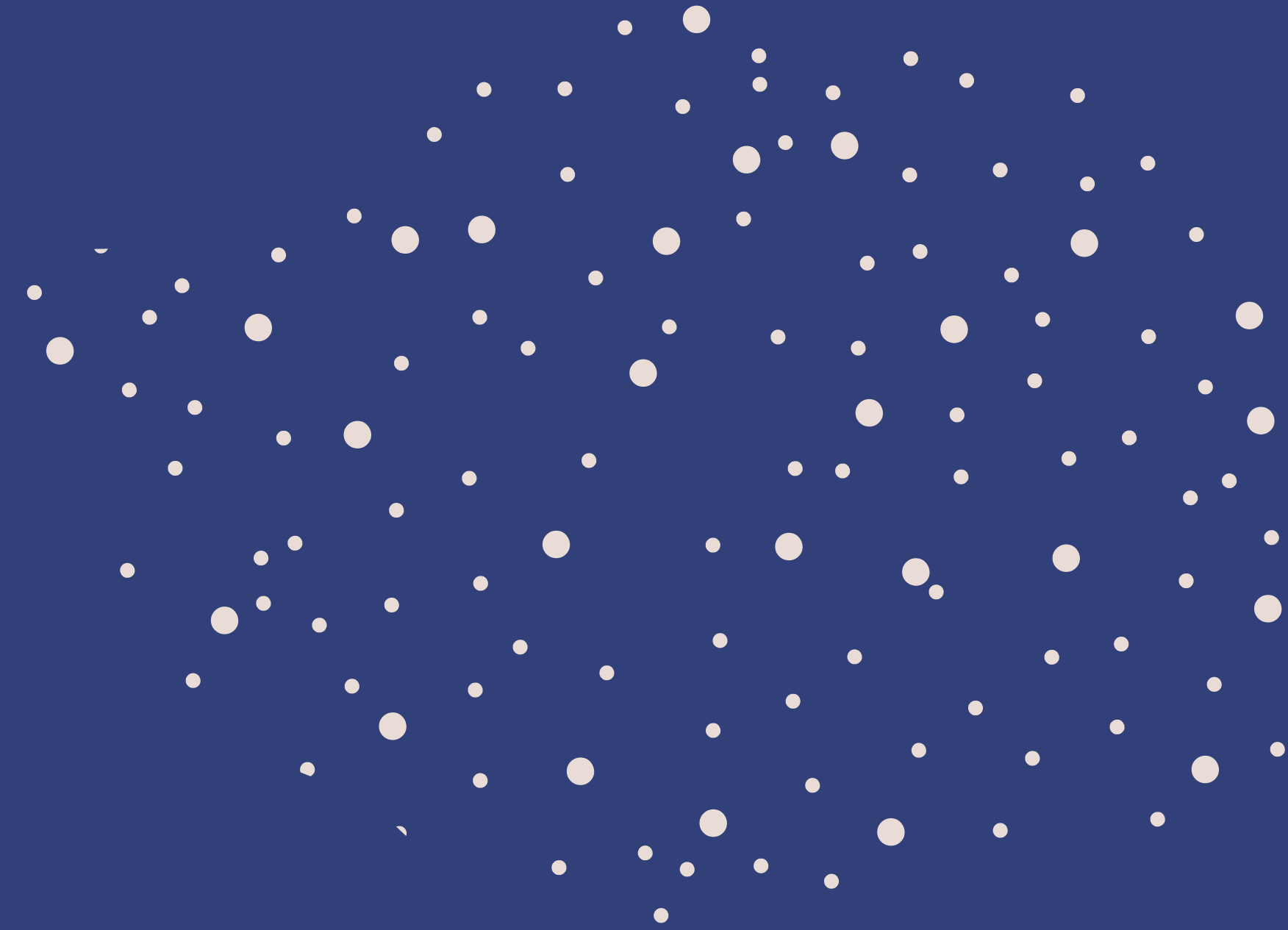
1. Ideal Contraceptive (CT) Quotes
2. Current CT Experience Quotes

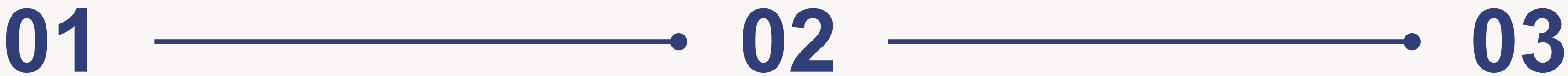
3. Emerging Personas
4. Distilled CT Experience Map

5. Circles of Influence Map
6. Insights Deck for each group

7. Key Influencers Cards

Ideation Workshops



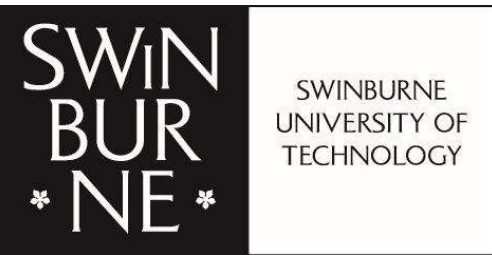


Come up with **new disruptive ideas** in contraceptive technologies for women

Emphasize the **value of human-centered design** to the field of contraception

Cross-pollination across diverse fields - from family planning, technology, design, health to gender studies.









Ideation Room

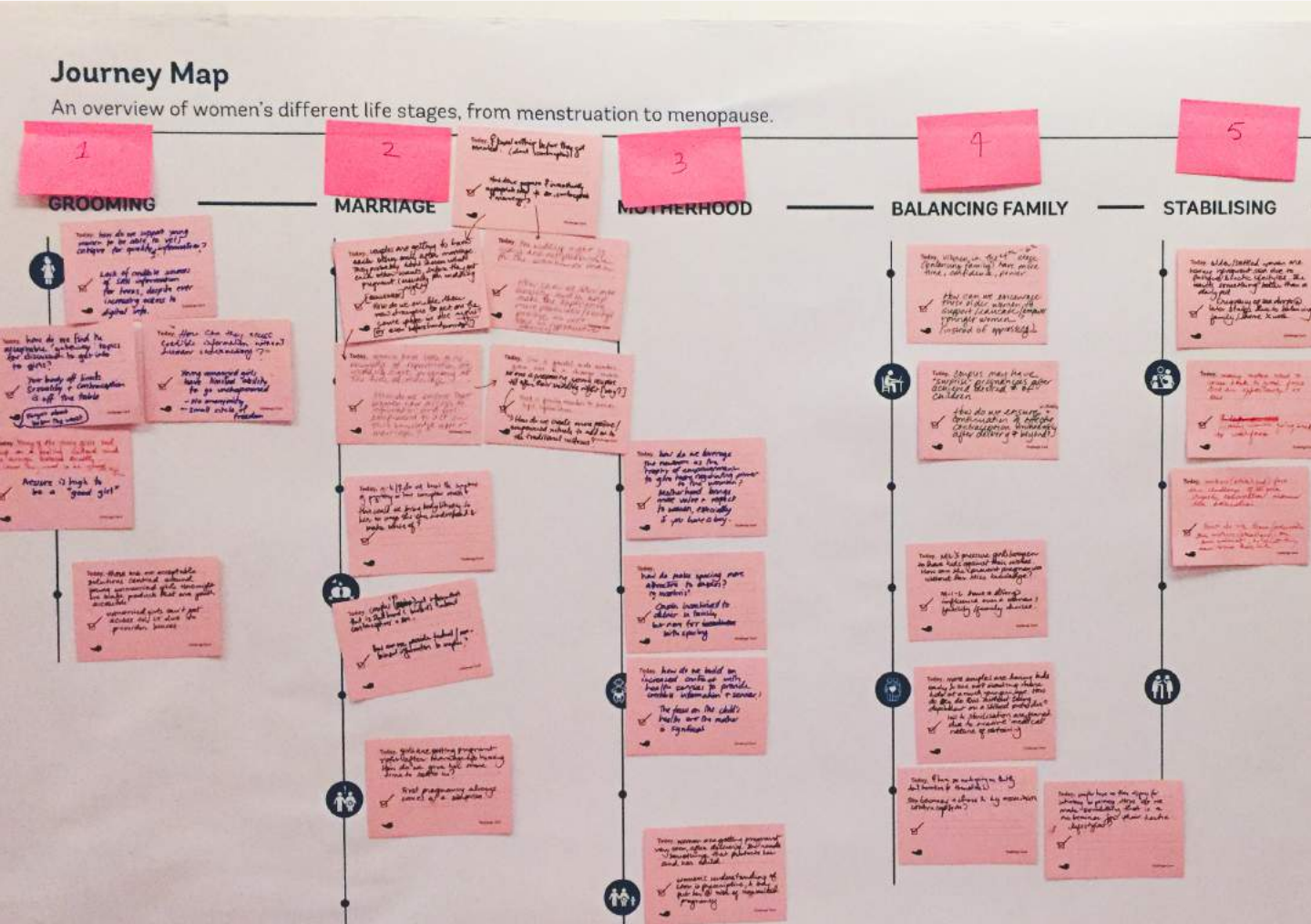
User-centered design is powerful because it attempts to give those benefiting from whatever is being developed a literal voice in the design process. This is inordinately valuable both for the team conducting primary research and for the team endeavoring to facilitate that same vibrancy through the development of interactive workshop collateral to stimulate the ideation sessions. This effort to keep the voice of the user present, and prominent, in the room allows all ideas to be tempered against the user's realities.





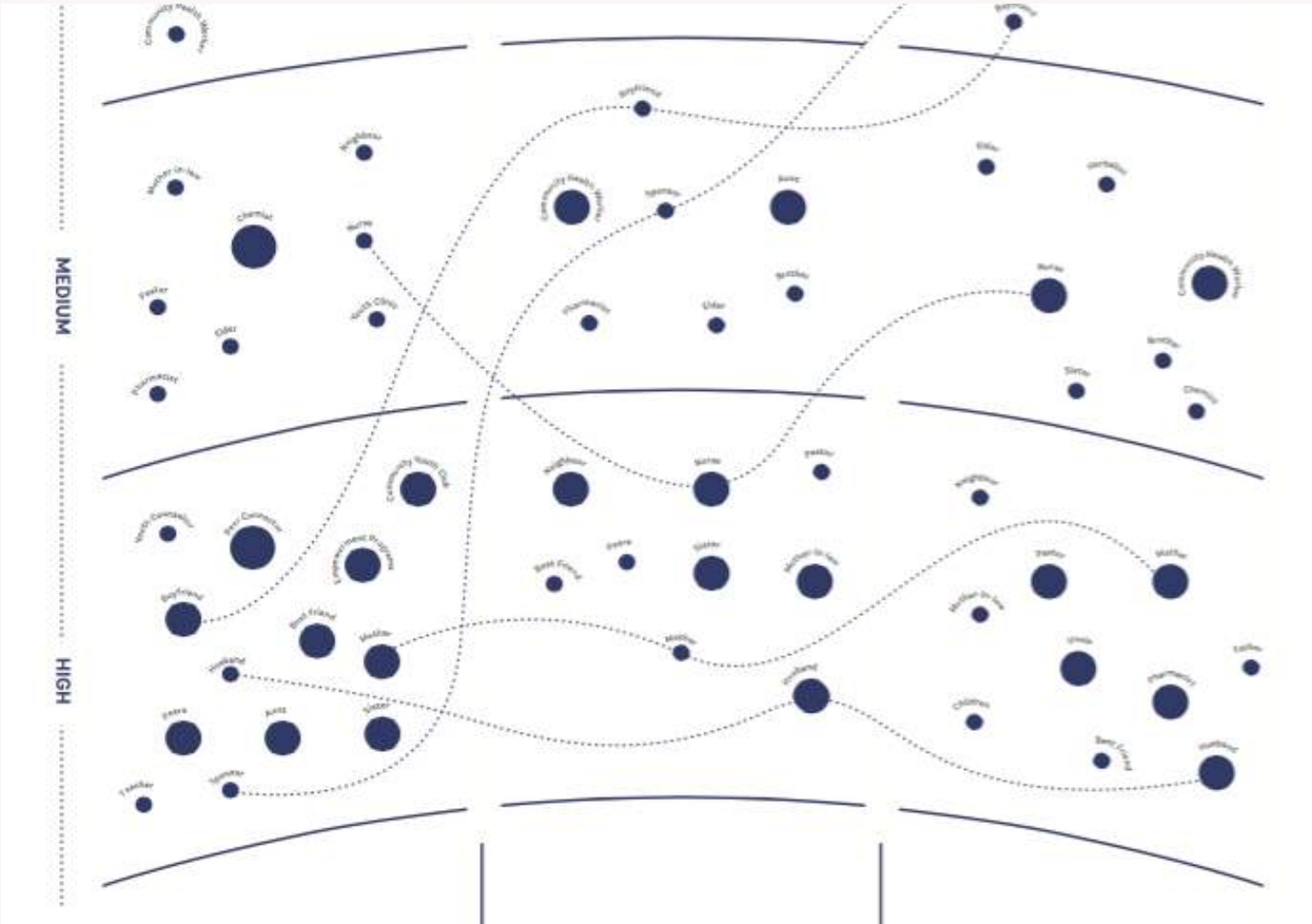
STAKEHOLDER WALL

One of the most visual parts of the workshop materials was a variety of portraits, context imagery and other relevant photographs to help bring to life a wider context for the workshops.



JOURNEY MAP

The CT Journey map is a format we prepared for the India workshop in which we captured an array of touch points, sometimes contradicting each other, to show the breadth of experiences women can face when dealing with CT. A second map was printed, and participants were invited to add their own challenge cards to it, mapped on the chronology of women's journeys.



INFLUENCER MAP

Directly pulled from the influencers card exercise from the field, the influencer map helped show the network of influencers and stakeholders involved in women's CT decision-making.



CT METHODS TABLE

As a great way for participants to engage with and discuss CT options, this table displayed a variety of CT methods encountered in the field. It was presented with a CT quotes poster that provided user feedback and stories tied to each method.



CT QUOTES

The CT quotes poster provided a straight-forward view into the benefits and drawbacks that available CT methods offered to users, based on quotes collected during our research.



FATTA BOX

Fatta Boxes or inspiration tool boxes were curated and exhibited at the workshop. These contained a range of products and items we had come across in the field - from lotions to magazines to hair extensions. This display helped bring to life the women we were seeking to be inspired by and their environments.



I think it's a really important benefit to the field to be able to get all of these people with different experiences in one location to ideate and to think about the development of future technologies. My favorite moment has been interacting with all of the technical experts that you've brought together at this workshop and really listening and learning about a lot of the fields that I have less experience in.

Kevin Peine, USAID

Workshop Walkthrough

The workshops were constructed in a series of complementary phases that not only introduced the participants to the realities faced by the women we met, but also helped them systematically make sense of the information for current and future needs. These phases did not always manifest through chronological sessions, but the workshops followed this overall structure.



<div>SESSION 1</div> <div>Intro to the workshop Why Kenya/India? Expert Inspiration Sessions</div>	<div>SESSION 2</div> <div>Cultural Immersion</div>	<div>SESSION 3</div> <div>Headlines Exercise Research Debrief User Needs & Challenges</div>
<div>SESSION 4</div> <div>Idea Generator World Building Ideation around User Needs Refresher on User Needs Concept Refinement</div>	<div>SESSION 5</div> <div>Open-floor Share-out User Challenge Stories & Role Playing Portfolio Consolidation Voting on Top Ideas</div>	<div>SESSION 6</div> <div>Final Concepts Concept Feedback with Users</div>

Immersions

Local field visits, movie screenings and multiple presentations of research learnings sought to familiarize participants to the context through various layers and types of information. The room was also set up to feel like an open interactive research report.

FORMATS USED

- Field visits
- Film screening
- Artist performances
- Impromptu show and tell sessions
- Live illustrators
- Breaks





FIELD IMMERSIONS

Early on in the workshops, participants visited neighboring markets, villages, communities and hospitals; sites determined in advance to get them to better understand the contexts and everyday challenges faced by the women.



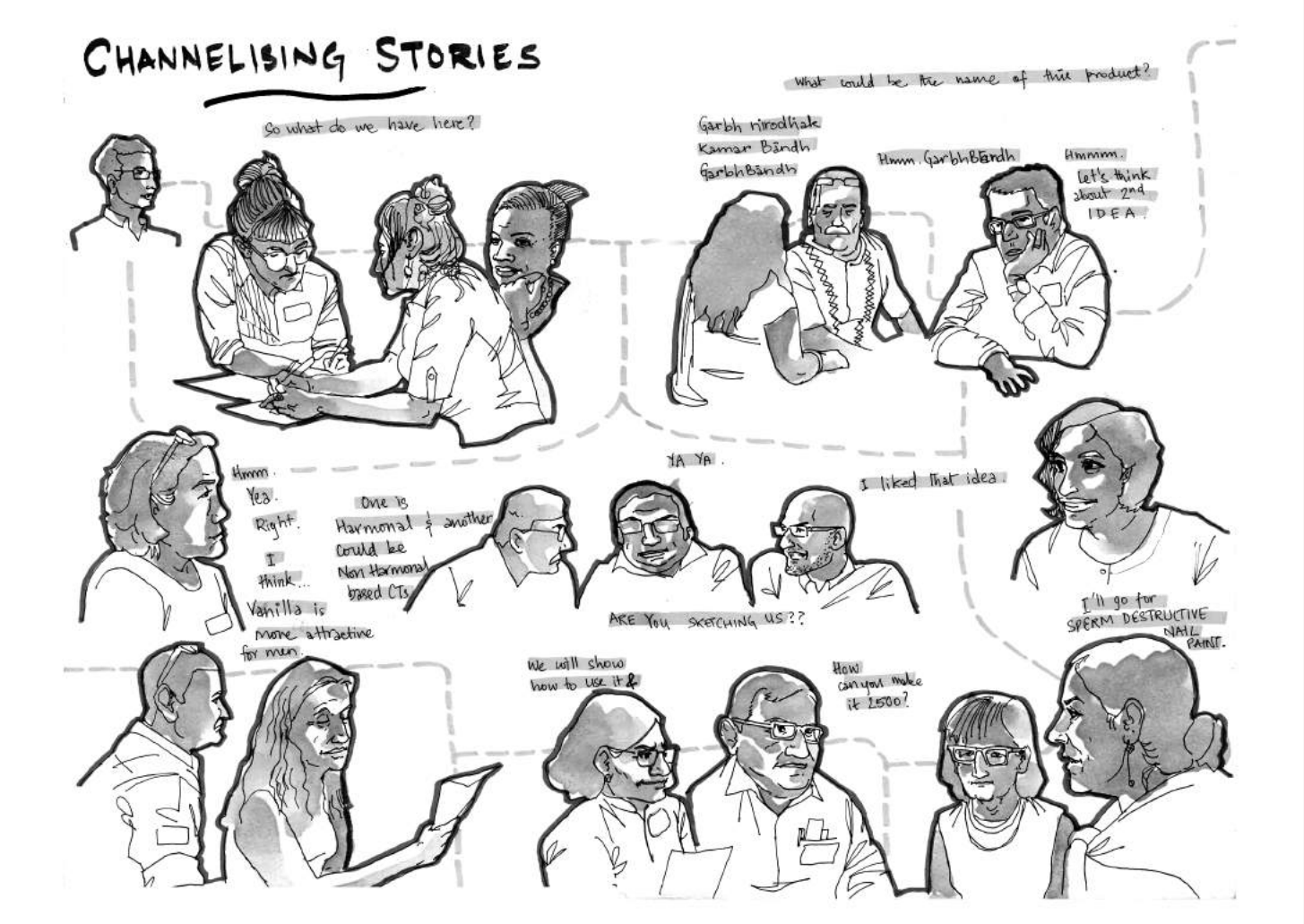
ZINE

We also designed a series of booklets for the participants bringing together stories, family planning ads and other fun but relevant snippets of information.

FILM SCREENING

In both the India and Kenya workshops, we screened films that were picked to shed a different light on the context. These films were not direct evidence but helped spark the imagination of participants and inspire them in new ways.





PERFORMANCES

Workshops have a tendency of becoming monotonous and repetitive in spite of the collective enthusiasm of the group seeking to create change. The fact that real ideas are generated outside of the intended sessions is often overlooked. Coffee breaks, cab rides, dinners, gallery visits - these interstitial spaces (a term coined by Hans Ulrich Obrist, a curator) are essential to creating the right settings for serendipitous conversations and meaningful collisions among participants.

We curated interstitial activities and moments- evening performances by local artists, movie nights, inspiration talks, impromptu show and tell sessions as well as many small breaks- in an attempt to create as many ‘in-between’ spaces within the ideation workshop.

LIVE VISUAL DIARY

Another way to maintain enthusiasm in the group was to have the event documented live by illustrators who alternated between documenting the event and sessions and facilitating discussions between participants by visualizing the ideas being discussed.

“Having that many local participants in the room who could say, ‘Well, this is what I know because I grew up here, this is my life’, really just puts a different spin on things.”

Mary Aikenhead, BMGF



User Profiles and Challenges

User needs are at the heart of any HCD process, and we made sure that we found compelling ways to immerse in new learnings and nuances during the workshop through a variety of activities and games like role plays, journey maps and persona cards.

FORMATS USED

- Diary pages
- Journey maps
- Challenge cards
- Challenge scenarios



03

OPPORTUNITY

How might we design CT solutions that evoke confidence in the user?

CHALLENGE CARDS

We created a deck of cards on which we captured key challenges faced by users we had spoken to, as potential ideation prompts and provocations.

01

OPPORTUNITY

How might we create a CT with an immediate and reliable return to fertility?

01

OPPORTUNITY

How can contraception be designed to reduce or remove the risk of unplanned pregnancies?

PATHWAY

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Grace - The Career Women

With a stable relationship and a successful business, she is an empowered woman keen on expanding her business, who wants to stay away from distractions that could distract her from her goals.

PERSONA CARDS

Used in parallel with the challenge cards, these cards were meant to shed light on the personas we had created from the women we met during research- their environments, aspirations, hurdles and experiences with CT.

X



THE COPING SOLOS

staying afloat, juggling many things in life. Women who don't want any more children but are unaware of available methods, they continue to use the same method despite many side effects.

I feel angry all the time. My husband keeps wondering why we are always fighting.

usually experience hard labor.

ETHEL, 31, NAKURU

Sometimes the pain gets so bad I can't even hang clothes on the line.

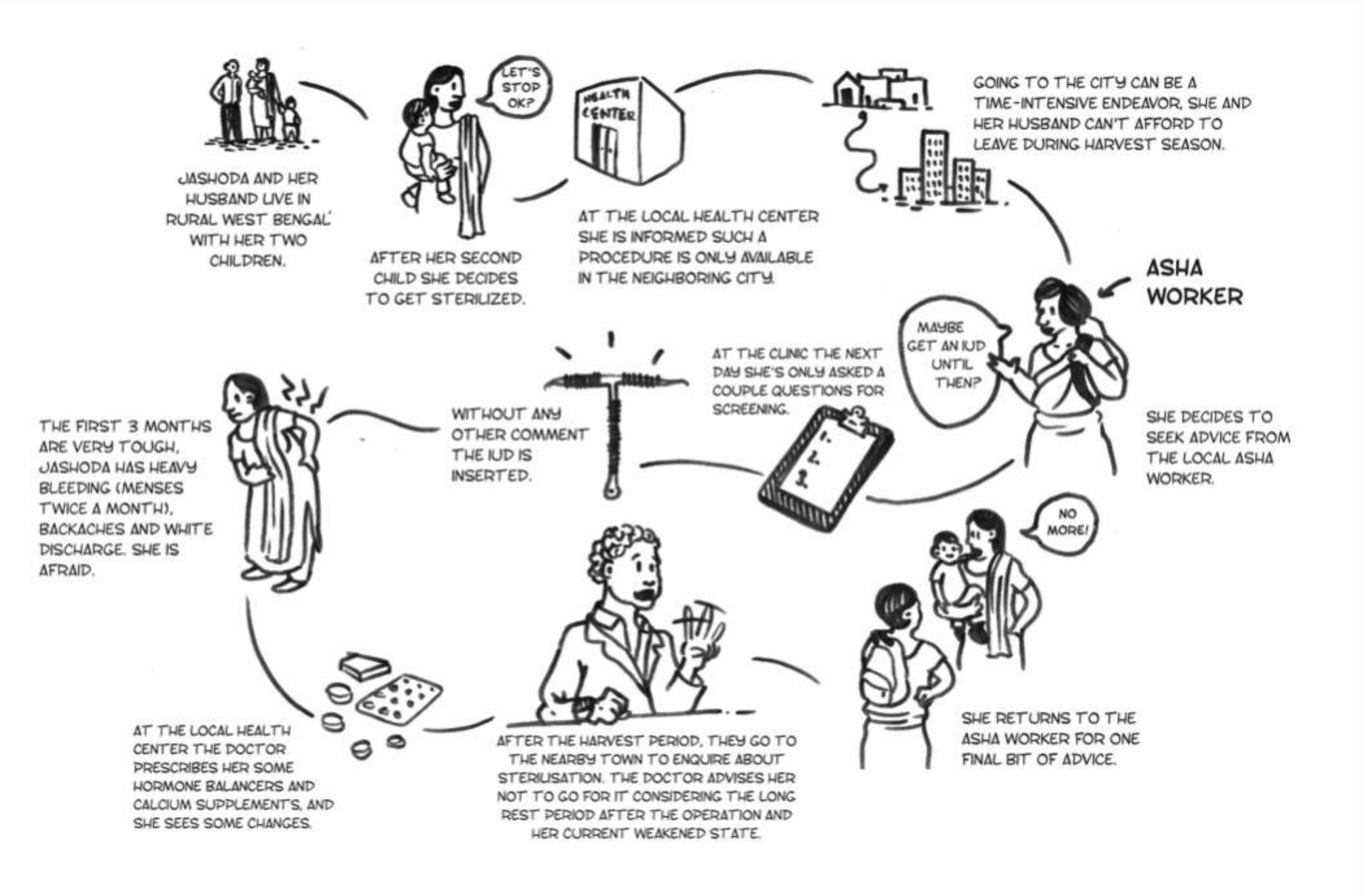
Lucy, 28, NAKURU

"IT'S DIFFICULT BUT YOU CAN'T HAVE ANY MORE KIDS, SO YOU ENDURE IT."

- MIRIAM, 32

DIARY PAGES

A series of posters depicting fictional diary pages helped bring to life these personas and further the objective of deep empathy with our users.



CHALLENGE STORIES

On the third day of the India workshop, we introduced a format we had not used in Kenya. Triads of participants picked a story we had crafted in advance, where a fictional user faces a series of complications and challenges in her CT use. The participants were then challenged to think of ideas for her challenge and present this to another group that played the role of this user for evaluation and critique.

“This meeting made clear to me that there aren’t just 2 or 3 or 4 different types of women. There are dozens of different kinds of women who need contraception and need different kinds of contraception, and that what we do have, while it is substantial, still leaves a lot to be desired.”

Bruce Hay, Caltech



In order to keep the thinking alive and thought provoking, we organized a series of activities to take into account future trends (and to make up some of our own). This resulted in a series of no-holds-barred, far-future-facing fictional concepts that opened up participants' minds and brought in a renewed spirit of play.

Headlines of the future
Futuristic concepts
Concept share-out

Futuristic concepts

Concept share-out



HEADLINES OF THE FUTURE

In order to help participants think about moonshot and future-facing ideas, we organized a headline-framing game during which participants wrote down headlines they imagined could exist in a world of the future and placed them on a timeline ranging from the near to the far future.



FUTURE CONCEPTS

Then the participants were tasked with choosing a few headlines and coming up with a CT that would exist in a world defined by those headlines. This resulted in a fun range of ideas that were shared among participants.

Our team introduced throughout the workshop dynamic ways to help participants come up with ideas, building on the information shared with them. We used various templates to capture ideas with gradually increasing levels of fidelity and complexity. More than 200 ideas were generated from the two workshops combined.

- Mad-lib concept template
- Extended concept template
- Idea generator
- Sticker voting
- Zine production

REAL TIME
DOSING
(FEEDBACK TITRATION)




OFF

ON

SELF
REGULATING
FERTILITY

REVERSIBLE
INJECTABLE



WOMEN'S
LIFESTYLE
RELATED

- What do we need?
 - Mobile phone (SMART)
 - Apple / Blacket / Watch available for free from the Govt (Health Dept) can be taken over by the Govt from a major illness after showing the patient's identification to the Govt. Only in extreme cases
- What else?
 - When the Apple / Blacket / Watch is taken, it is unlinked and the original is not pre-loaded is the hardware. The App is installed. Powered and data harmonized
 - All need provision
 - All change activation can be available at permanent or temporary levels and several levels and applications where the Apple / Blacket / Watch is replaced
 - Tell us about your concept
 - The Device (Blacket / Watch) can be activated by the owner's finger print.
- How does it work?
 - When the Apple / Blacket / Watch is turned on for the first time it gets connected to the mobile phone through the App. The App provides the harmonized levels in the person's body, when you use.
 - When needed, the body can activate the device through the App or directly by pinching the bottom on the device which then transmits results through the entire application to the Govt.
 - Also it connects at any well as the device is activated by the Govt. The finger print. Govt cannot not track the finger print.
 - Also on the entire application is loaded and in the woman's body, this cannot get pregnant.

SWITCHEROO your idea.

How to make a device that switches between two different states.

DISCRETE CONTROL

SWITCHING POINT

Tell us about your concept

How does your idea work? What is the main function of your idea?


switches act as inter-locked circuit & switch on or switch off simultaneously with possibility of self-switch

app based
function on
a timing app

©

[illegible]

GARBH BANDH



- Non invasive
- Slow releasing
- long acting

Also comes in Gold & SILVER

* **GARBH BANDH**: A combination of an Indian traditional ornament **Kamavast** and **Tassar**, which can be wrapped around the waist and is the **inverted** or the **patch** for containing the contents.

Page No. _____

DATE _____

[illegible]

Contraceptive / STI protective multi-vitamin
ame your idea Gummy

Use big-data from
mobile phones

→ contraceptive
protection
→ STI protection
→ DRUGS!
→ constantly notified
to address personal needs

Tell us about your concept

How does your solution fit
into the market? (What is your business model?)

Their related uses: real-time data collected on the user's (teenager, worried) smartphone or mobile phone text messages, user data to create a customized multi-vitamin that caters to specific users. The vitamin provides contraceptive as well as STI protection and can be optimized thru to experiment. User's notified via push, is available via push notifications, data is constantly collected by phone to provide real-time updates.

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ame your idea.

the design before the development and many problems can be avoided

HEY SIR!

"FERTILITY OFF!"

OR

"FERTUTY BOOST"

TRANSMITS

"NANO IMPLANT"

"ULTRASONIC WAVE"

Tell us about your concept

BLUETOOTH
YOUR TUBE"

VOICE ACTIVATED

SUPER INTUITIVE

ON DEMAND

DISCREET + INVISIBLE

HONORS FERTILITY

FOR// NEWLY MARRIED
FIRST TIME PARENTS.

MECHANISM
mechanical
gene &
environmental
2010-2015

95

Share your idea.

Write the question below. Use the space on the right to write your answer.

I. Reversible injection + confirmation step

Tell us about your concept

How many people will be involved in your project?

How much money will you need?


This will be a reversible injection that will provide insurance for taking it to court w/ a string test to confirm that codes are inactivated.

per - test : uses existing technologies, (better test) programming test

Same test to confirm reversibility.

How many people will be involved in your project?

How much money will you need?


 • long-term relationship requiring
 long-term protection
 • layers on top of an existing culture
 → creating growing results of
 wisdom
 • Has a noted report on quality of
 skin but not to desirable

72


[illegible]

"I-BIRTH" bracelet
 arms your idea.

How the bracelet identifies the user

user
 detect identity of user → creates real-time updates

Benefits: discrete, long-lasting, unobtrusive, wear, continuous modified to create real-time updates in behavioral drug detection.


 ame your idea.

USE PHYSICS?
 FLUID DYNAMICS?
 BIOCHEMISTRY?

• non-dynamic
 • slow
 • non-invasive
 • non-invasive
 • Ready issues
 • Accurate
 • Long lasting

Tell us about your concept

A device that a nurse/health provider/
 RNPT? Use on you that provides or
 improves fertility.
 (We need to figure out the science behind it.)
 (Would become more administrated after
 some time?)
 ↳ Unethical can harm/kill cancer!

FBC shot "Fertility by
choice" ^{same your idea}

How do you plan to develop this concept and how can we help you?


Tell us about your concept

How do you plan to develop this concept and how can we help you?

As part of routine care for newborns, fertility is turned off until a point at which fertility is desired.

Thus can be reversed. "
"intentional parenchning"

How do you plan to develop this concept and how can we help you?



 A noninvasive contact lens for older women?

Tell us about your concept

How does it work? What is the technology?

Her eyesight is reducing w/ age.
 It could be a lens she wears
 and force compound w/in on there
 into a blood stream.

100%

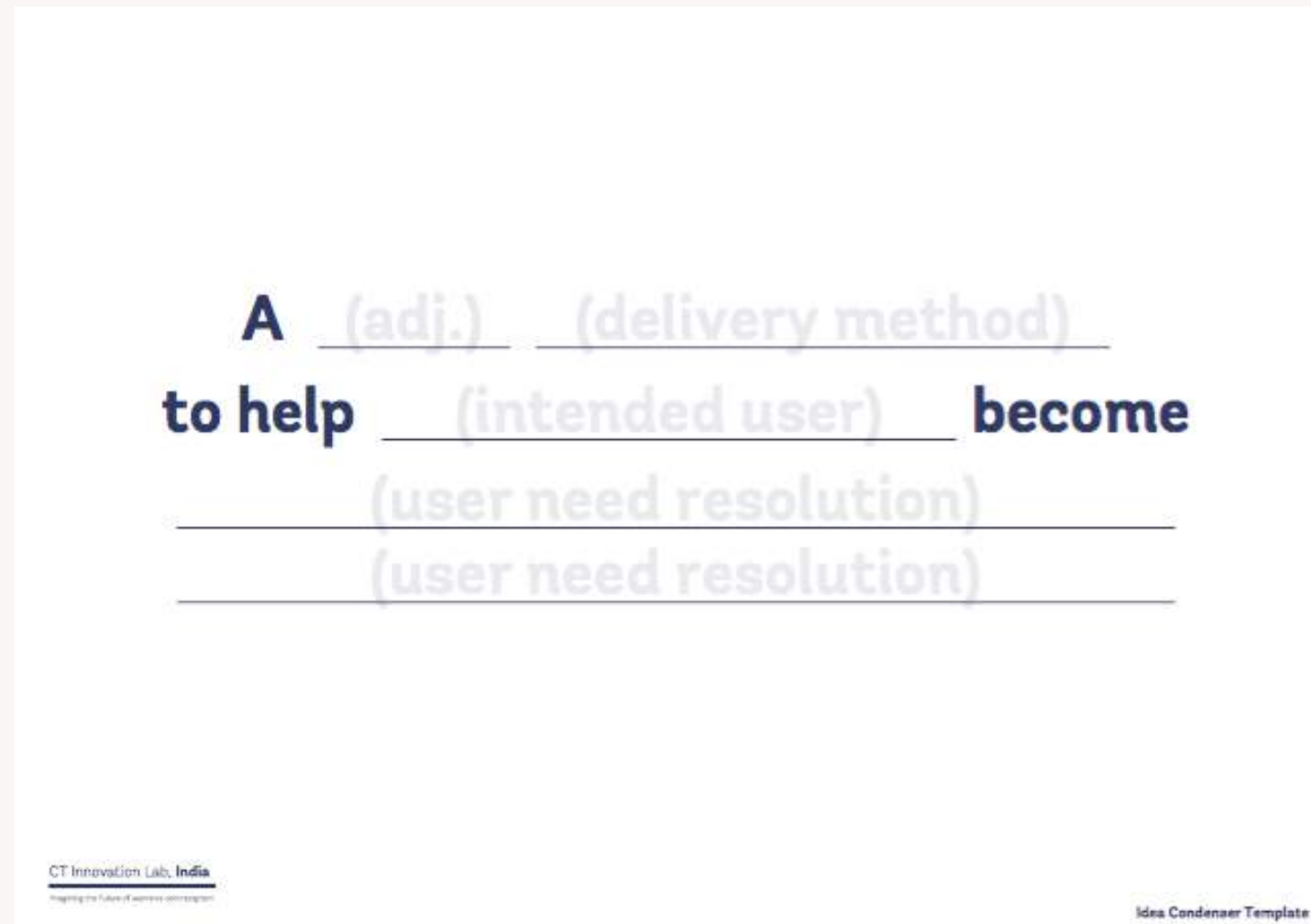
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Self Removable IUD

same your idea.

Tell us about your concept

An IUD that contains detachable Inert which can be activated via a special solution which can be self administered.



IDEA CAPTURE SHEETS

We used two formats to help facilitate and guide idea generation. A more concise format was introduced earlier to help structure the participants' thought process, whereas the second format was used to expand on and detail out the strongest ideas.



STICKER VOTING

The workshops ended with a voting session intended to help participants review all the ideas they had come up with and take a first stab at prioritizing some of them. Voting criteria included the ability to increase uptake, improve the current user experience and technical feasibility.



DIGITAL IDEA TEMPLATE

The last step of the workshop was to compile the top fifteen to twenty ideas from the voting exercise. These were then revisited by a new group of participants using a digital template, where these ideas were detailed out further.

**A short acting microchip to help young people become less
reliant on health facilities.**

**A non-surgical ovulation tracker to help single mothers take
charge of their fertility.**

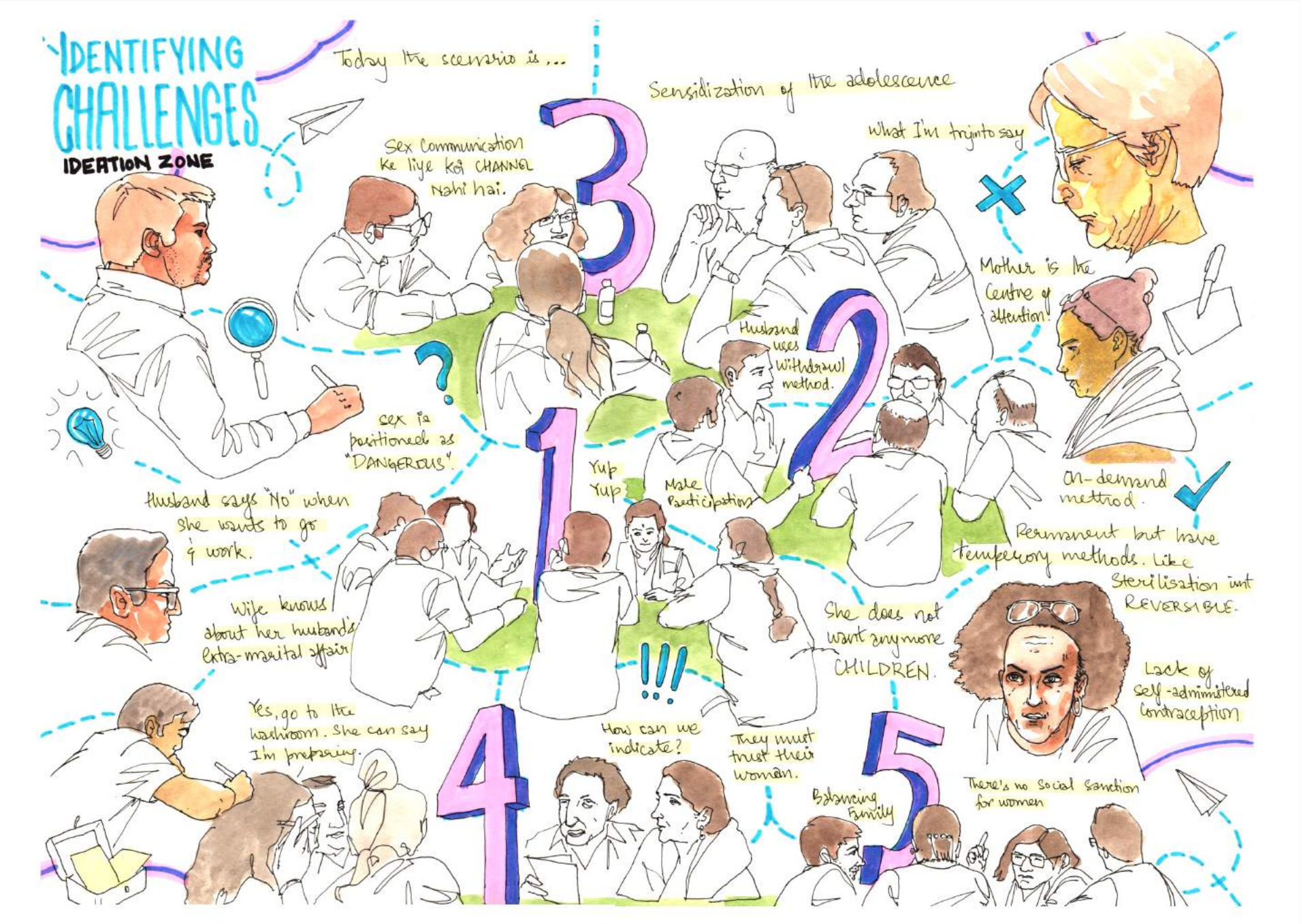
An accessible surgery to help young people empower themselves.

**An accessible handheld scanner to help women not using CT due
to side effects remain in control of their decisions, even if they
want to reverse them.**

IDEA GENERATOR

The idea generator was a new digital synthesis tool created for the workshop. It is a software that takes participants’ ideas and shuffles them according to method and user to create new ones. These were shared during the second ideation session to reinforce linking new ideas to user needs and encourage the participants to generate a range of ideas.

**A permanent physical barrier to help sexually active women
regain control over their routine.**

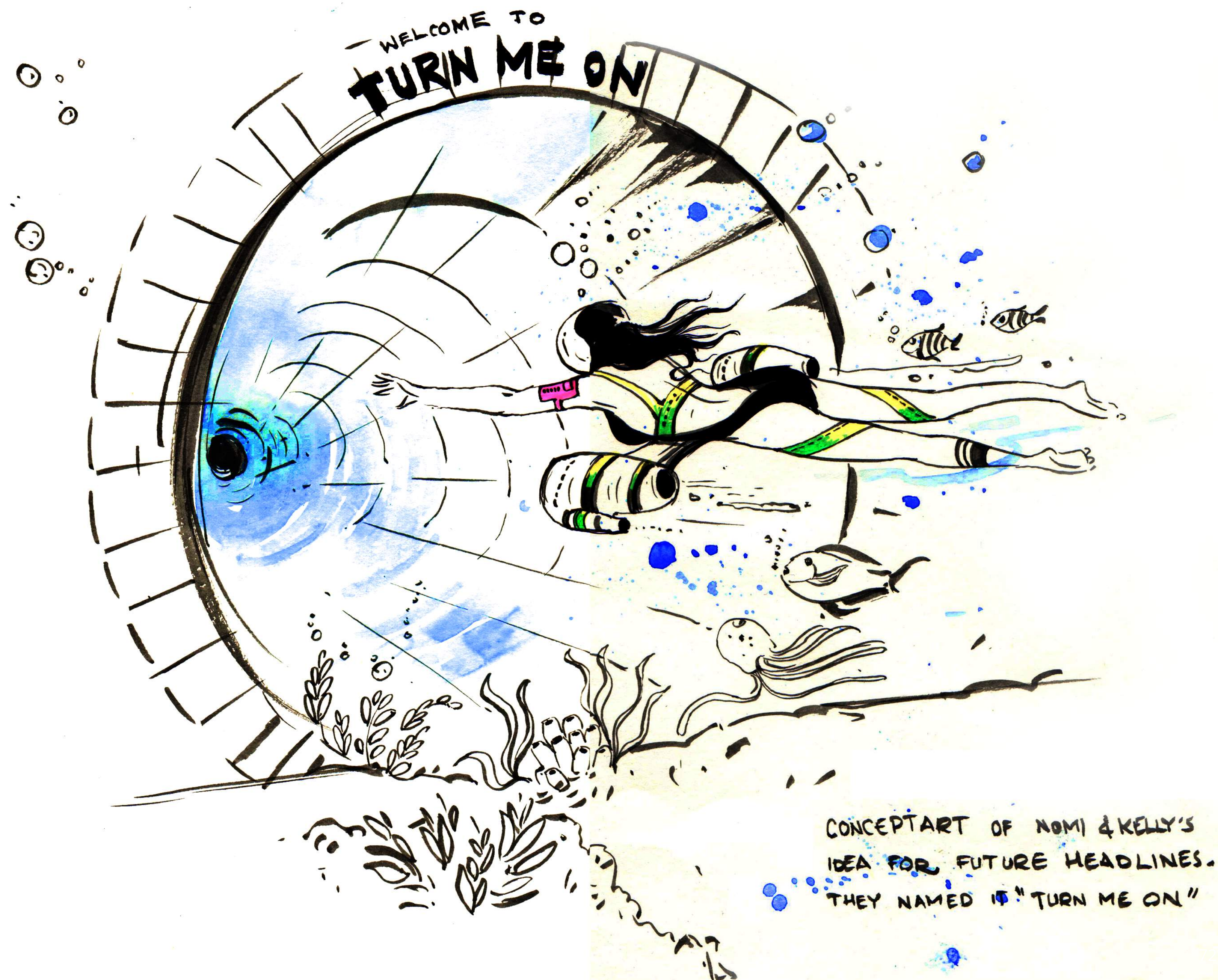


COMMEMORATIVE ZINES

The key to a successful innovation workshop is to get it to live beyond the few days that participants spend in the workshop setting. To extend the experience, zines were created with content generated during the workshop to thank participants for attending and highlight key moments.

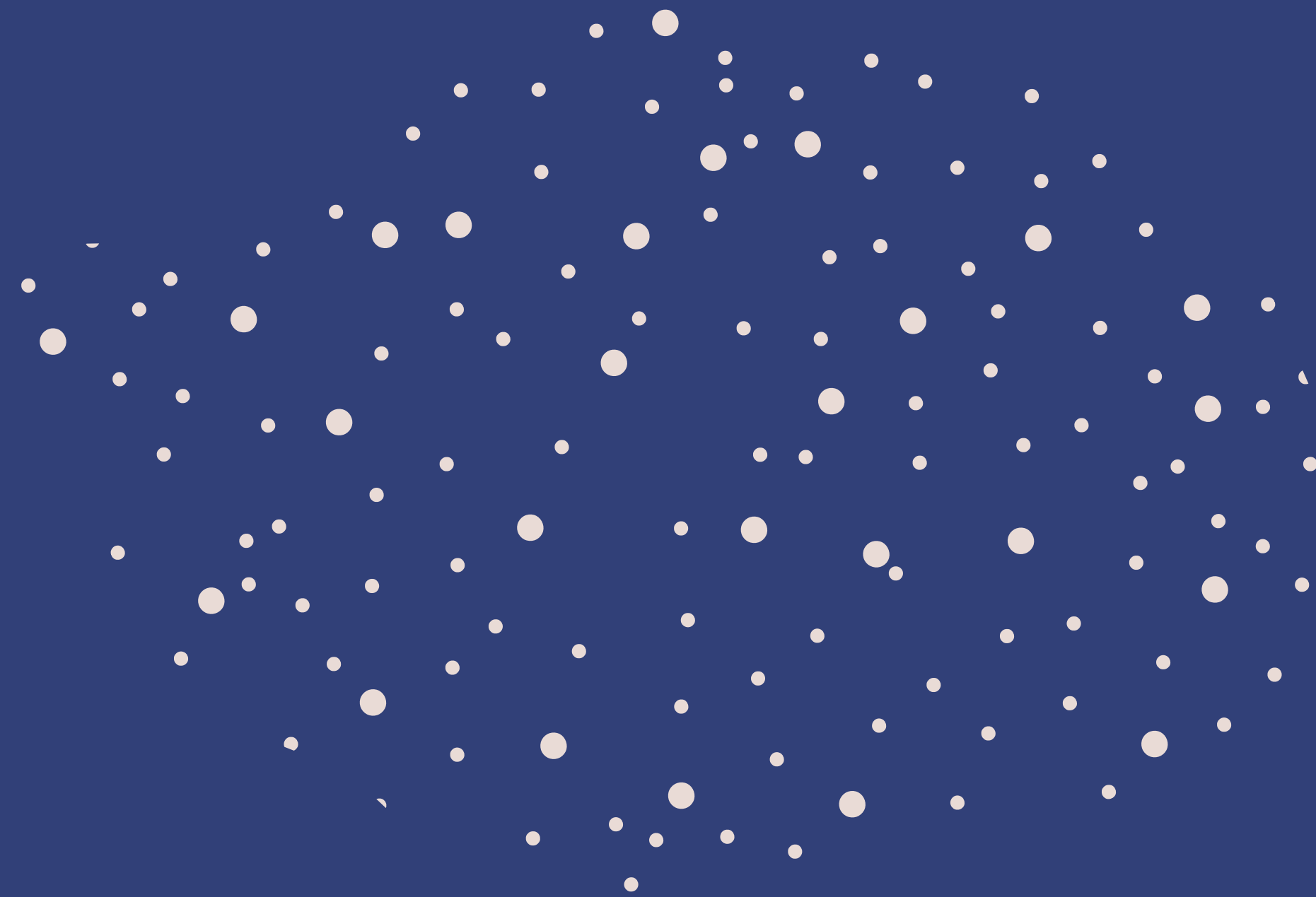
“For somebody like me that has been in contraceptive technology development for 30 years, sometimes you get stuck in your old ways and so this was an opportunity to hear new ideas, new thinking, to hear from people whose needs haven’t been met through their reproductive lives and have these fantastic new ideas that they would love to see explored.”

Laneta Dorflinger, FHI 360



CONCEPTART OF NOMI & KELLY'S
IDEA FOR FUTURE HEADLINES.
THEY NAMED IT "TURN ME ON"

Conclusion



For you dear reader

We hope that this foundational work forms the basis for continued efforts in the space - to focus on continuously innovating on revolutionary products that are rooted in user needs and can dramatically improve their contraceptive experience.



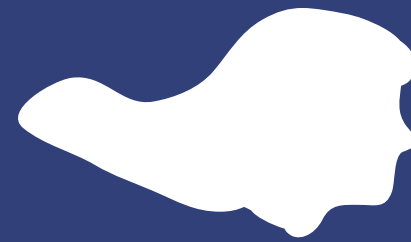
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fhi360.org / jmeyer@fhi360.org



CT Innovation Lab

Imagining the future of women's contraception