

CycleTel™: Research Review & Update

INSTITUTE FOR REPRODUCTIVE HEALTH, GEORGETOWN UNIVERSITY

FERTILITY AWARENESS-BASED METHODS (FAM) PROJECT

MAY 23, 2013 – MOBILE TECHNOLOGY & FAMILY PLANNING: NEW FINDINGS AND NEXT STEPS

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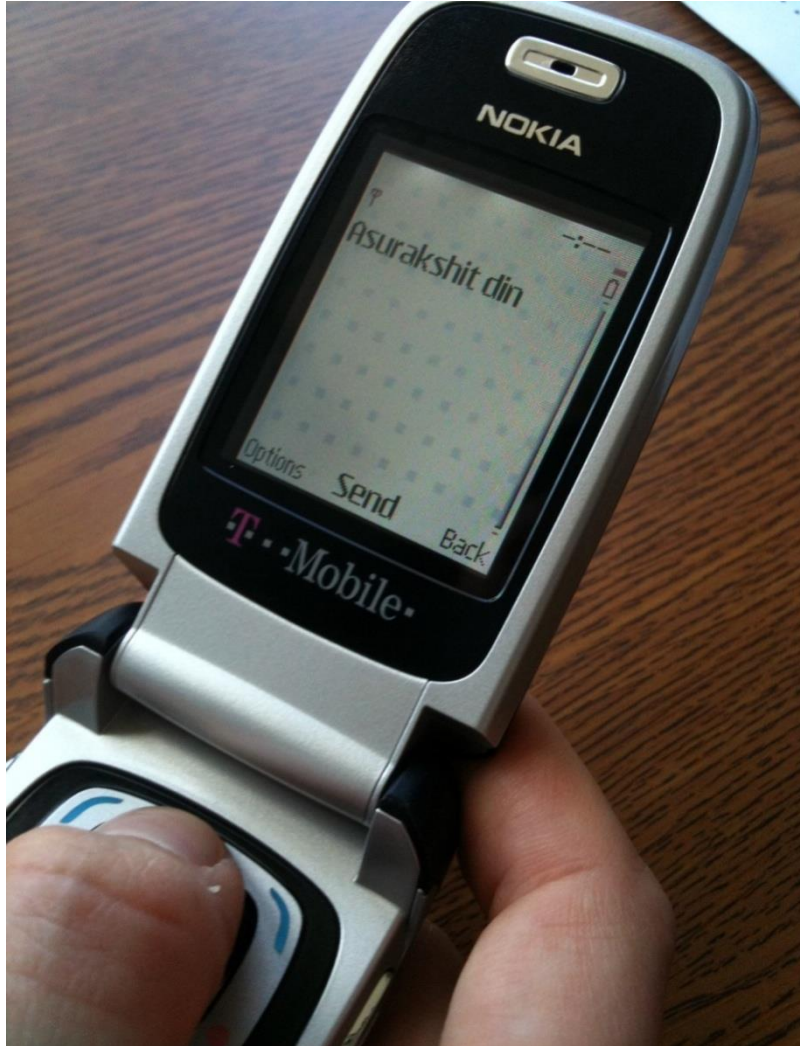
USAID
FROM THE AMERICAN PEOPLE





Q: Can we leverage the growing telecom industry and ubiquity of mobile phones to expand access to, and address unmet need for, family planning?

PRODUCT HYPOTHESIS: FAMILY PLANNING ON THE MOBILE PHONE



Develop a mHealth service that uses text messaging to facilitate use of SDM, a knowledge-based FP method.

This innovation would...

- Support SDM scale-up, realizing economies of scale via automated technology
- Bypass health system and commodity/procurement supply chain
- Reach consumers directly, via accessible means

THE INDIAN TELECOM MARKET IS IMMENSE

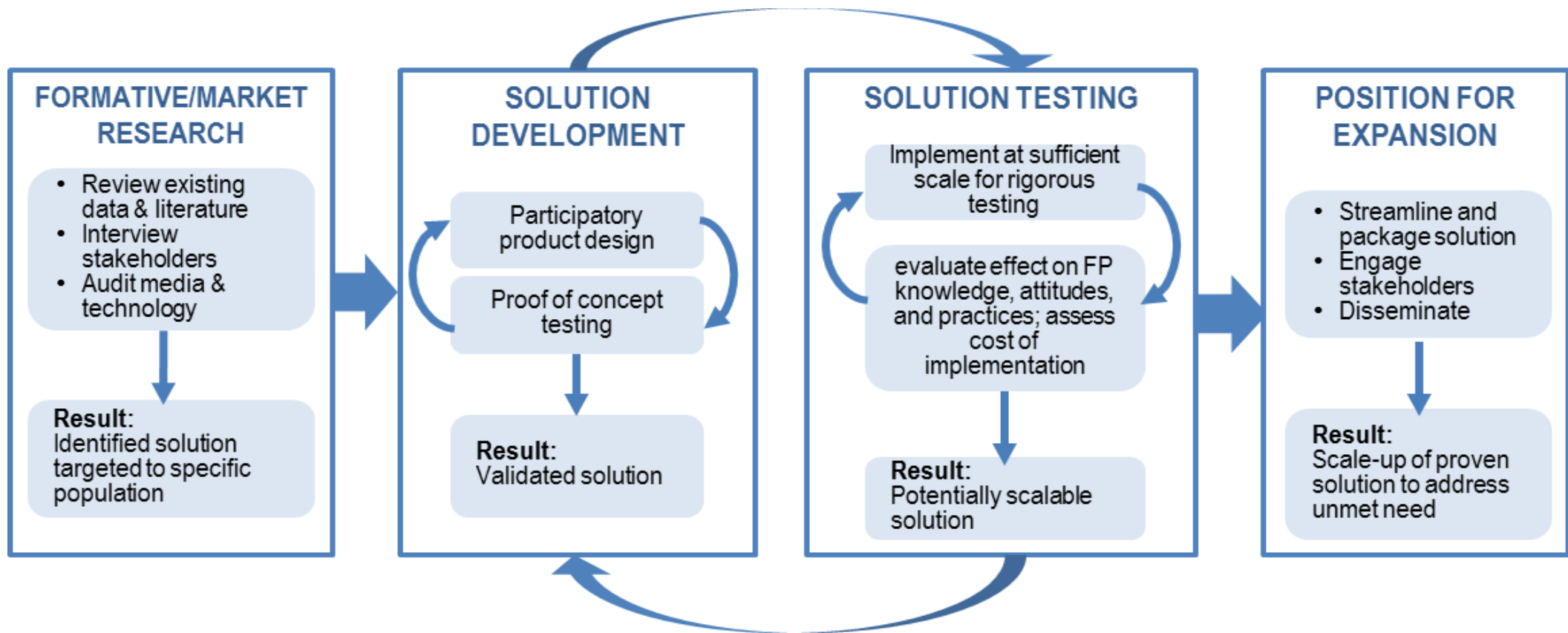


Over 929M subscribers in India (1.2B population)—about 76% market penetration, with a 65/35 urban/rural split.

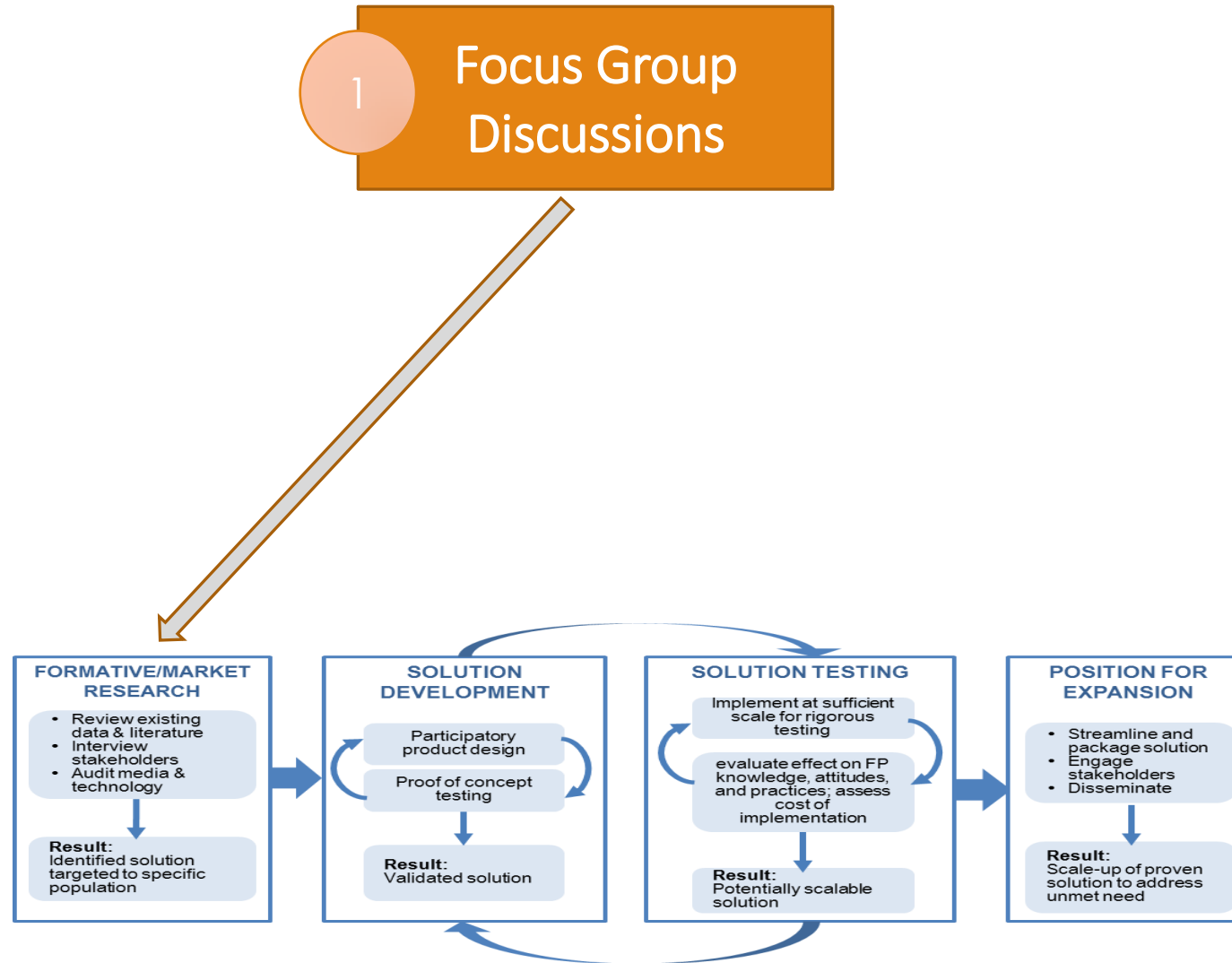
World's fastest growing market in terms of new subscribers.

Source: Telecom Regulatory Authority of India, May 2012

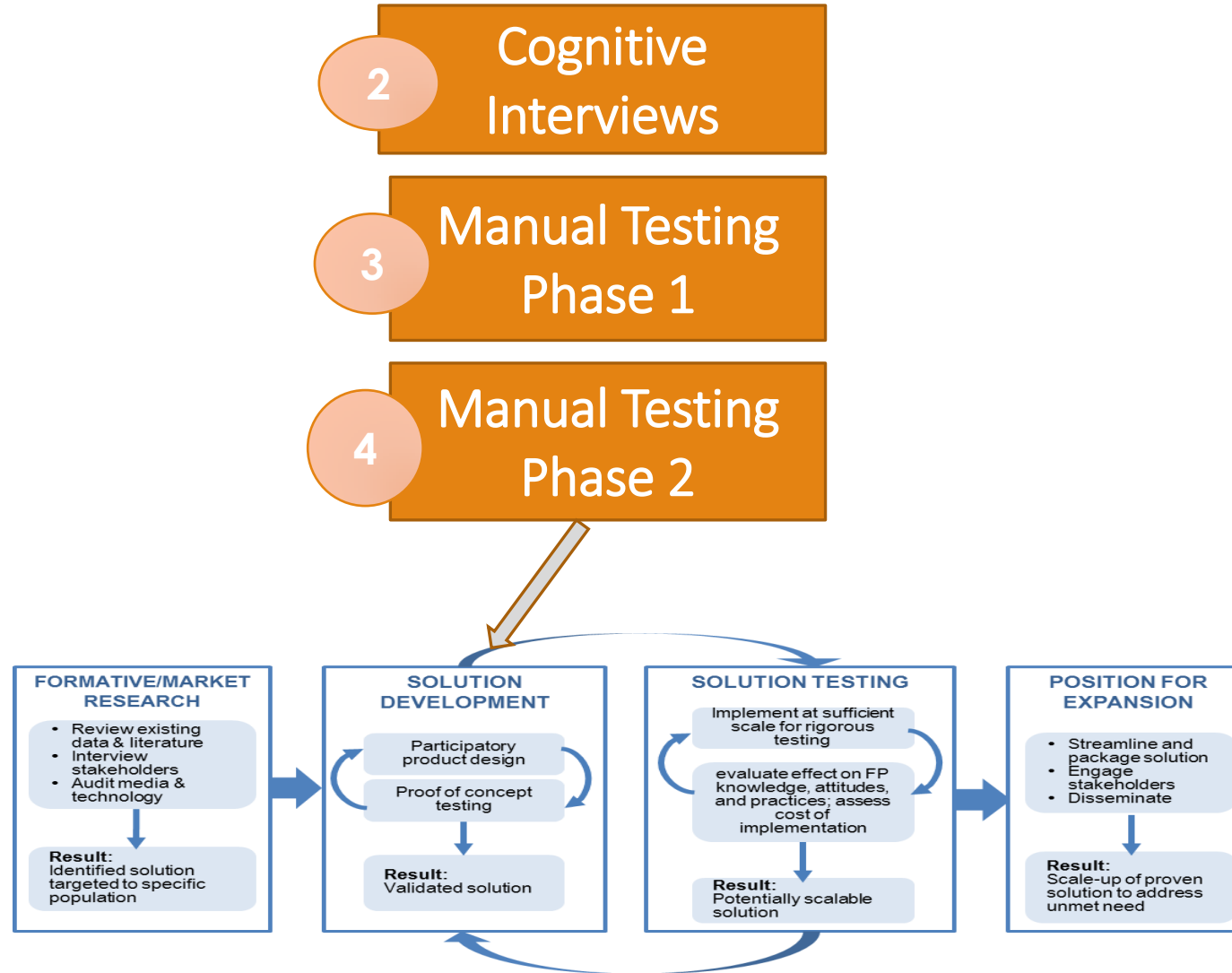
IRH'S SOLUTION DEVELOPMENT CYCLE



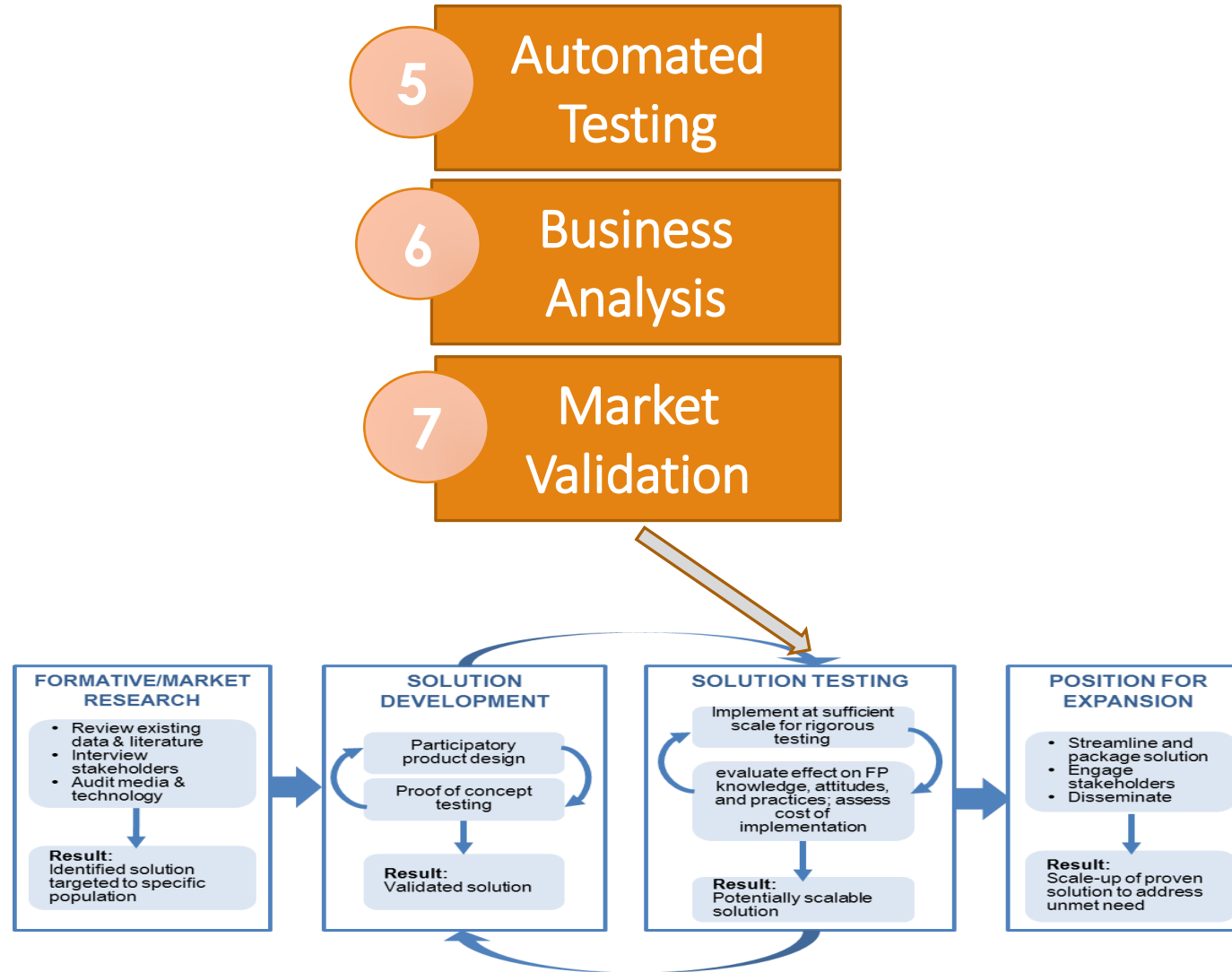
CYCLETEL'S DEVELOPMENT STAGES



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CYCLETEL'S DEVELOPMENT STAGES



STUDY LOCATIONS



- Manual Testing Phase 2
- Automated Testing
- Business Analysis
- Market Validation

- Focus Groups
- Cognitive Interviews
- Manual Testing Phase 1

1 FOCUS GROUP DISCUSSIONS

PARTICIPANTS

54 participants w/ birth spacing needs

- 4 groups of women (n=32)
- 2 groups of men (n=16)
- 1 group of couples (n=6)

OBJECTIVES

- Understand phone use
- Determine potential interest
- Explore appropriate messaging and service preferences

FINDINGS

NEED & DEMAND EXISTS

- Strong interest in natural methods, but incorrect knowledge of fertile days
- Both females and males interested in receiving messages
- Expressed wide range willingness to pay

SERVICE PREFERENCES

- Non-technical, discreet messages -- “unsafe day”
- SMS > voice
- Hinglish > English
- Timing of day – 1-4pm or after 9pm
- Helpline required

COGNITIVE INTERVIEWS

PARTICIPANTS

18 participants (14 women, 4 men)
with birth spacing needs

OBJECTIVES

- Verify message comprehension
- Adapt and finalize messages

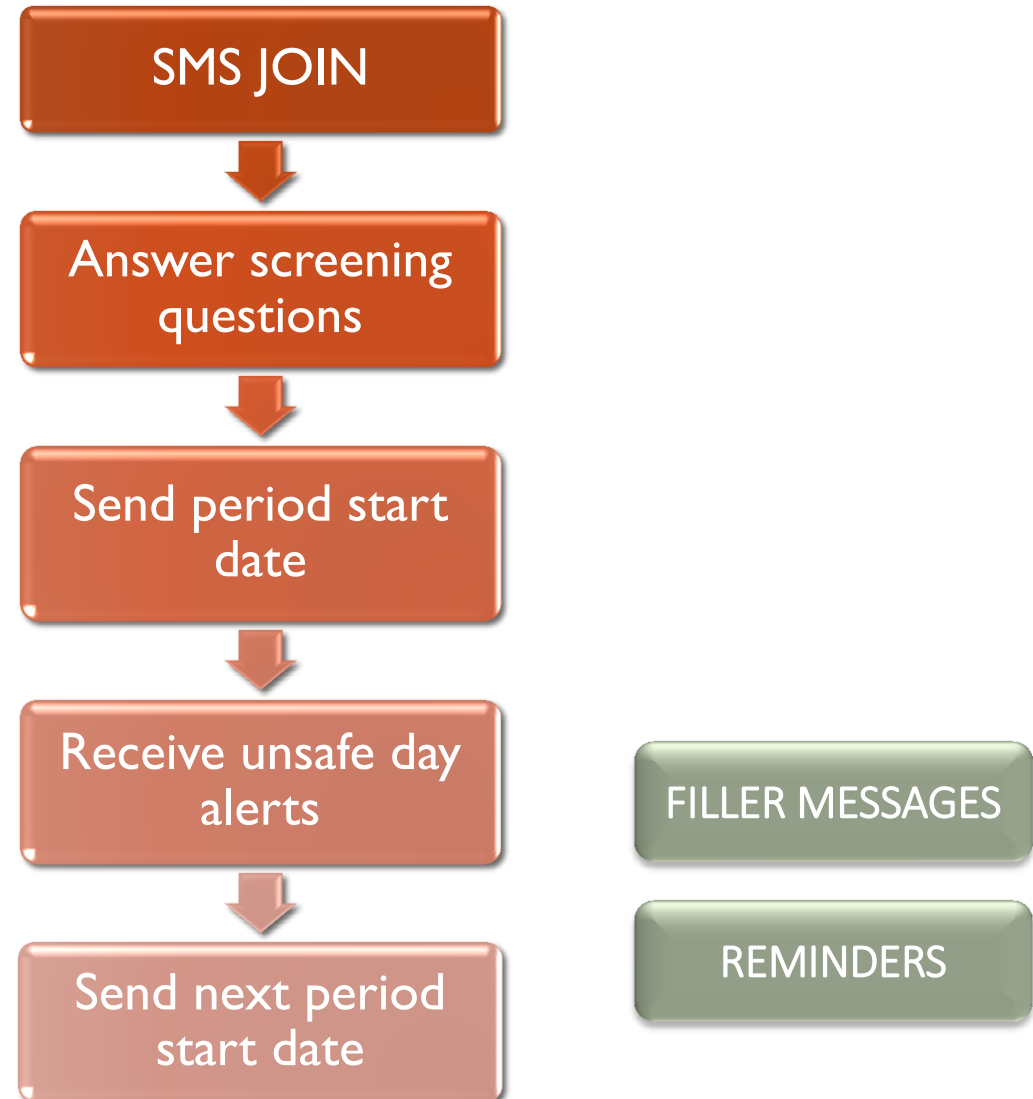
FINDINGS

USE SIMPLE,
EVERYDAY
LANGUAGE

IMPORTANCE OF
MESSAGE
STRUCTURE &
CONTENT
ORDER

- English words were sometimes better understood than Hindi – e.g., “natural”, “date”
- The Hindi words for “unsafe day” (Asurakshit din) were well understood by all
- Greetings/supportive words (i.e. Great!) are unnecessary
- Helpline number should be given upfront
- Limit message to 1 SMS (broken SMS are confusing)
- Responding to “yes/no” questions easier than entering keywords (i.e. RED, DATE, AGREE)
- Give date example (i.e. 26 NOV) for user to follow
- Avoid numbers when possible

SNAPSHOT OF USER JOURNEY



MANUAL TESTING PHASE 1

PARTICIPANTS

- Enrolled 26 women
- Ages 21-28 (26 years mean)
- *Homemakers* with birth spacing needs
- Mobile phone owners

OBJECTIVES

- Enroll women for 2 cycles to assess feasibility, satisfaction and correct method use (using FrontlineSMS)
- Troubleshoot problems and determine how to improve service
- Explore profile of target audience



FRONTLINE SMS

FINDINGS

19 women completed the study

AS A FAMILY PLANNING METHOD...

- All understood when pregnancy was likely
- 95% reported improved couple relationship
- 100% expressed interest in continuing use
- All would recommend to friends

AS A MOBILE PHONE SERVICE...

- Messages were viewed between 12-10pm
- All said it was the right # of messages
- 84% said sending/receiving SMS was very easy
- 5 women called the helpline
- All participants said they would pay for the service (Range: Rs25-50 per month)

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MANUAL TESTING PHASE 1

"I am mostly free at that time of day. It maintains privacy." – Female

"We were just sending the day of our menstruation and then received messages. It's very easy." -Female

"I was showing the message to my husband and we were managing our fertile days accordingly." - Female

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MANUAL TESTING PHASE 2

PARTICIPANTS

- 88 female participants enrolled
- Ages 24-33 (28 years mean)
- *Working women*, birth spacing needs
- Mobile phone owners

OBJECTIVES

- Enroll women for 2 cycles to assess feasibility, satisfaction and correct method use
- Troubleshoot problems and determine how to improve service
- Explore profile of target audience

FINDINGS

80 women and 10 men completed exit interviews

AS A FAMILY PLANNING METHOD...

- 92% were *very satisfied* with CycleTel to prevent pregnancy
- 22% reporting having unprotected sex during an unsafe day in the 1st cycle; this decreased to 13% in the 2nd cycle
- 70% of women reported showing husbands CycleTel messages
- Liked the most: ease of use, convenience, lack of side effects
- All would recommend to friends

AS A MOBILE PHONE SERVICE...

- 37% of participants called the helpline during the 1st cycle of use, 15% called during the 2nd cycle of use
- 95% said it was the “right amount” of messages
- 83% of users said that they would *be willing to pay* on average Rs. 33 per month for the CycleTel service, ranging from Rs. 15-400 (US \$1 = Rs. 45)



ThoughtWorks®

FRONTLINE SMS

SOLUTION DEVELOPMENT

MANUAL TESTING PHASE 2

“My husband is very shy, every time we go to the doctor, he sits outside and I talk. CycleTel has provided us an easy solution at home.”
-Female

“I received all messages on time. I appreciate the reminder messages because I may get busy and forget, but CycleTel never forgets.”
- Female

AUTOMATED TESTING

PARTICIPANTS

- 715 female participants recruited
- Ages 19-36 (30.5 year mean)
- Education level: “higher secondary” and above
- Need for family planning
- 28% were employed

OBJECTIVES

- Ensure CycleTel technology functions properly with a significant user base
- Test integration with operating call center
- Further hone CycleTel’s value proposition

ThoughtWorks®

FINDINGS

Completion: 197 follow up interviews after cycle 1; 653 exit interviews with female participants; 131 male exit interviews

AS A FAMILY PLANNING METHOD...

- Half of the participants were interested in using the service after the study—functionality issue uncovered
- At follow-up, 97% recalled using condoms or abstaining on unsafe days; at exit, 5% reported incorrect use

AS A MOBILE PHONE SERVICE...

- About 25% indicated that they used the helpline
- Reported receiving the right amount of messages at the right time
- Lower willingness-to-pay: Women ~11 Rs/month, Men ~17 Rs/month

AUTOMATED TESTING

What did users like most about CycleTel (n=653)?

As a family planning method...

	%
It is low-cost/free	53.9
Doesn't affect health	80.1
No side effects	88.4
My husband opposes using another method	17.2
Religious/moral reasons	9.0
It is easy to use	72.9
It is effective	56.5
It is convenient	49.2
Other	6.3

As a mobile health service...

	%
Easy to use	78.7
It maintains my privacy	79.5
Timely reminder	87.4
Messages come when expected	66.6
Right amount of messages	65.5
Accessible helpline	27.6
Frequency features	9.2
Other	36.6

BUSINESS ANALYSIS

OBJECTIVE

Develop an operating (i.e. business) model for CycleTel, based on target market size, go-to-market infrastructure, prospective partners, and financing, in order for CycleTel to be a sustainable venture in India at scale by 2017

METHODOLOGY

The analysis was based on:

1. Proof of concept and pilot results
2. Interviews with industry experts
3. Secondary data sources
4. Rigorous financial analysis



BUSINESS ANALYSIS

STEPS	Key Questions (Examples)
Identify target segments and size the market	<ul style="list-style-type: none"> How many women of reproductive age in India (1) have an unmet need for birth spacing, (2) own a mobile phone and (3) use SMS? What age group would be most attracted to CycleTel and why?
Industry analysis to develop core business assumptions	<ul style="list-style-type: none"> How many users does the service need to attract corporate donors? What % of mobile phone owners use and pay for mHealth services? Would telcos be interested in launching CycleTel? Why/Why not? What is the role of the aggregators and other stakeholders?
Develop a Go-to-Market strategy/infrastructure	<ul style="list-style-type: none"> Prospective partners—who will work with us to acquire/sustain users? Prospective donors—who will be willing to provide seed capital? How do we market the service? Operating model—how will the venture operate?
Identify possible business scenarios based on assumptions/risks	<ul style="list-style-type: none"> Define a high achievement and modest achievement case. In each case, what level of resources is needed to reach target # of consumers within a specified period of time?

BUSINESS ANALYSIS

FINDINGS

TARGET ~16 MILLION WOMEN

CycleTel should target ~16 million young Indian women (20-34 years old) with high birth spacing needs, and independent access to mobile phones in 2 phases. Different target markets for 2 phases, technology will be adapted

MARKET-BASED MODEL CAN LEAD TO SUSTAINABILITY

CycleTel could be a **market-based solution, based on a user as payer subscription model** and eventual advertising revenue at volumes. Users would be charged 30 rupees monthly (\$0.54). **Sustainability is possible** within a 5-year period, but it will take **significant investment from donors** to reach break even

HIGH ENGAGEMENT NEEDED

Success would require broad based promotion via mix of channels—high engagement approaches (face to face) early on are key to attract customers. Partnership with Mobile Aggregator also needed.

MARKET VALIDATION

WHY?

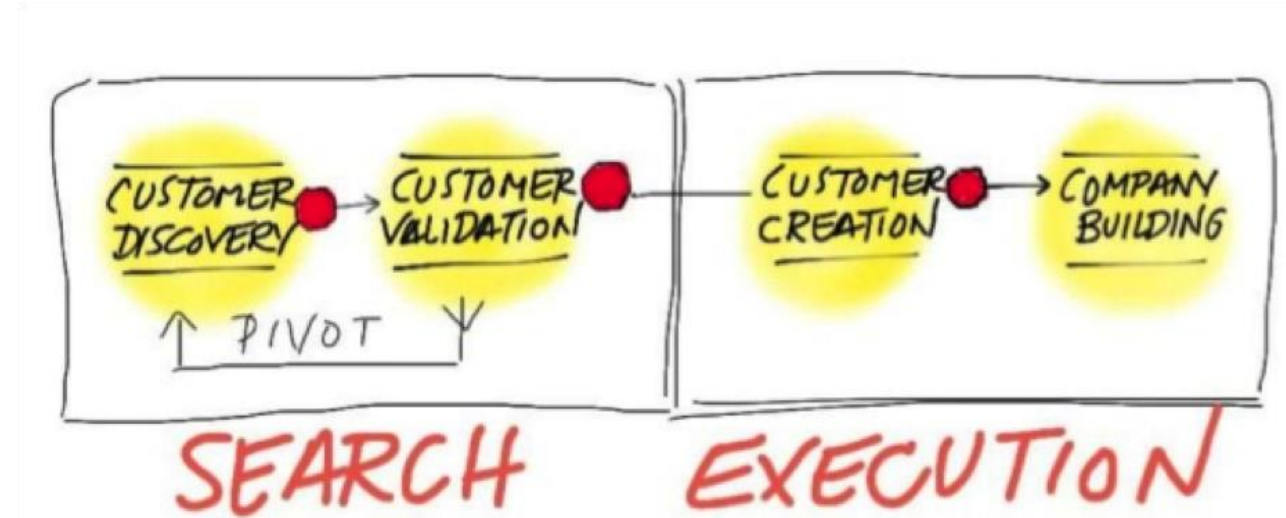
“Most start-ups fail due not to the failure of product development but due to..... the lack of customers”

-Steve Blank

ASSESS THE VIABILITY OF THE CYCLETEL MODEL IN THE MARKET, WITH ACTUAL CUSTOMERS, UNDER REAL WORLD-CONDITIONS

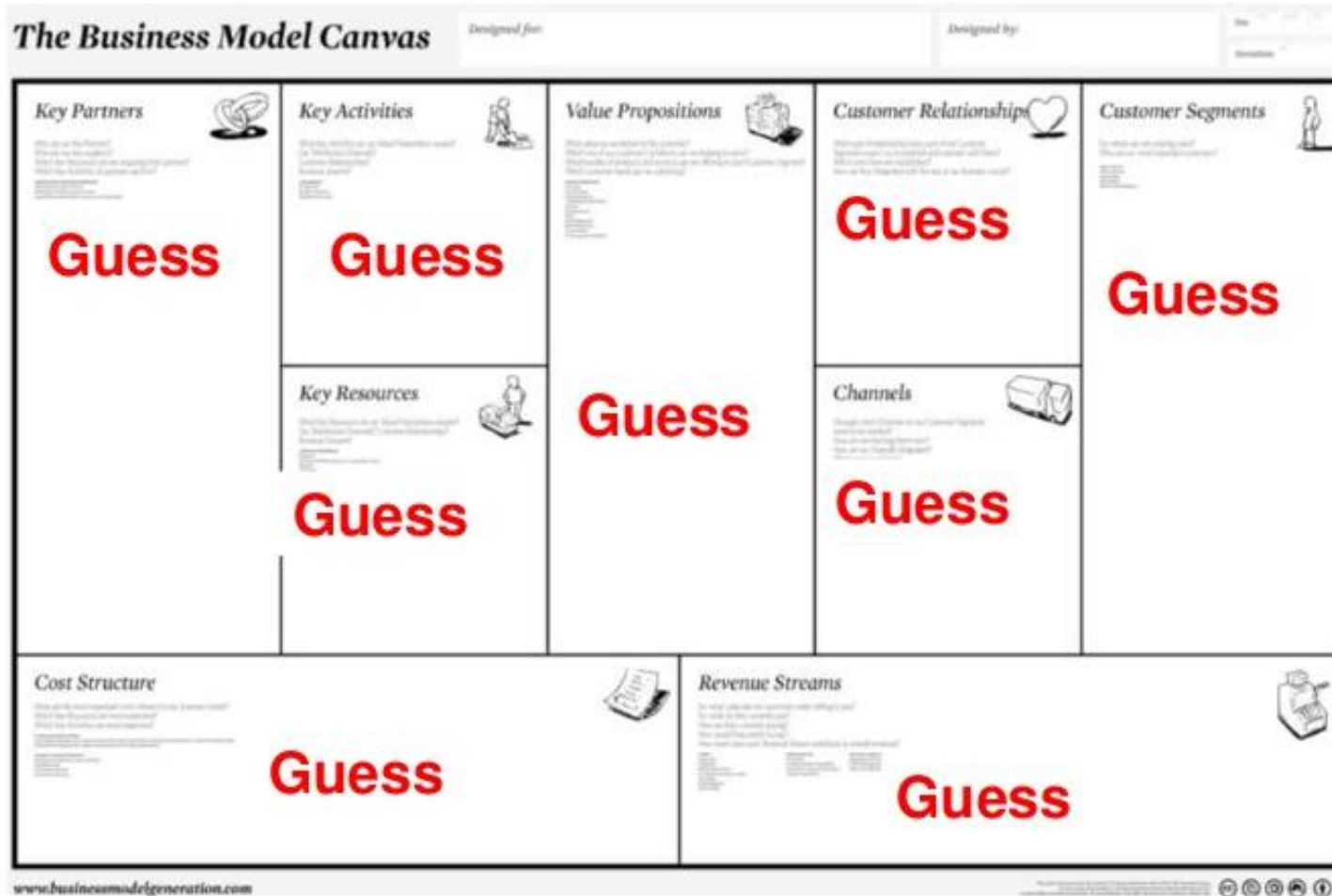
If CycleTel is to be a market-based solution, we must validate in the market:

- Who is our customer?
- What is customer demand?
- What is our customer development process?
- What is our customer conversion?



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MARKET VALIDATION – ENTRY



Proves that the business model tested and iterated has a repeatable, scalable model that can deliver the volume of customers necessary for a sustainable company. **It tests the model's ability to scale** – product, customer acquisition, pricing, value proposition, and channel activities.

E.g. The CycleTel ecosystem

MARKET VALIDATION – DESIGN

METHODOLOGY

- Lean Start Up: Hypothesis Validation
- Business Model Generation

OBJECTIVES

- Collect sufficient data and learnings to validate or invalidate assumptions of our customer development, market entry, and business model
- Learn which engagement channels have promise for sales and conversion
- Show early customer traction, proving product/market fit and strengthening business proposition for partners, especially MNOs
- Validate if CycleTel can be a market-based solution for women in India

TARGET POPULATION

7,500 households in NE and SE Delhi

APPROACH

June-August 2013

High-engagement marketing—door-to-door recruitments with Sales Agents & follow-up calls via call center as customer care and leads converters

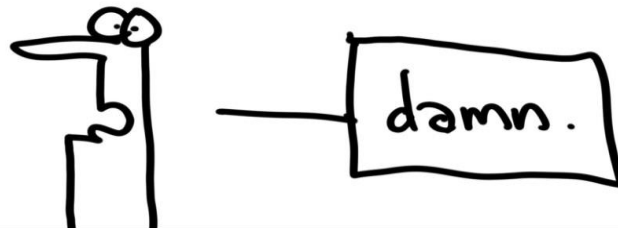
Promotion—free for 1 month, then payment

KEY LEARNINGS

- 1 DEVELOP YOUR PRODUCT WITH INPUT FROM PROSPECTIVE END-USERS
- 2 TECHNOLOGY ADAPTATION IS ITERATIVE AND ON-GOING
- 3 KNOW YOUR MARKET, VALUE CHAIN, AND MODEL
- 4 EVEN THE BEST PRODUCTS DON'T SELL THEMSELVES – DESPITE BEING DIRECTLY ON YOUR PHONE
- 5 MHEALTH CAN BE A COMPLEMENTARY HIGH IMPACT PRACTICE

"technology
changes,
humans
don't."

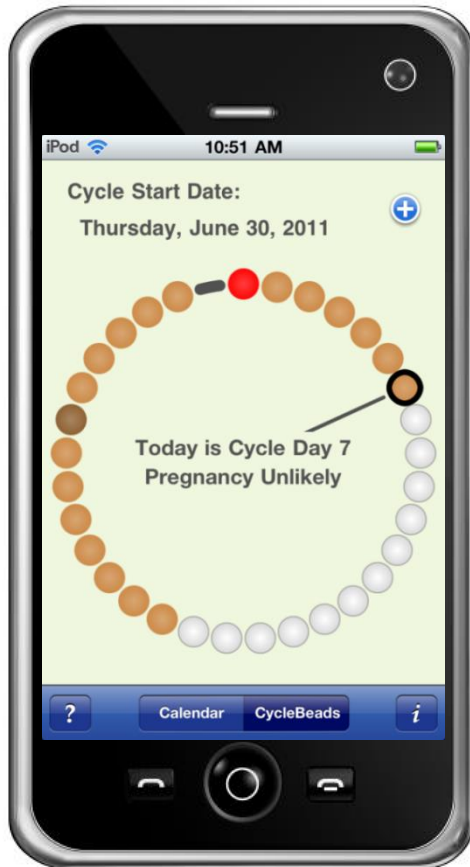
- deb schultz



©hugh

TECHNOLOGY ITERATIONS

iCycleBeads & iCycleBeads Online



TECHNOLOGY ITERATIONS 2: Reaching Low Literate Users

LOWER-LITERACY TECHNOLOGY: IVR

- Expressed discomfort with SMS
- Less than 50 % of women could report understanding the meaning of any given message
- Of 25 participants, only 1 understood the CycleTel concept
- Tendency to push “1” immediately and not listen to rest of message



LOW-LITERACY ETHNOGRAPHIC

- Fertility awareness education needed first
- Reaching women on mobile phones will be hard:
 - Husbands closely monitor use
 - Not acceptable for women to receive calls from unknown numbers
 - Calling a toll-free service *may* be a possibility, and real person has to be on other side (costly)
- Too many new concepts at once
 - Health via phone
 - Fertility/FP knowledge

WHY THIS MATTERS TO YOU: NEXT STEPS FOR ENGAGEMENT

- **IN INDIA**—distribution partners for a high-engagement model
- **IN OTHER COUNTRIES**—potential to adapt CycleTel for different settings, acknowledging various models, different markets, & varying utility
- **AWARENESS**—regarding technologies that support SDM use
- **EXPLORE INTEGRATION**—with other mHealth family planning services, or mServices that reach women



It's not a faith in technology. It's faith in people. Technology is nothing. What's important is that you have a faith in people, that they're basically good and smart, and if you give them tools, they'll do wonderful things with them. It's not the tools that you have faith in — tools are just tools. It's people you have faith in or not.

- Steve Jobs

www.CYCLETEL.org