

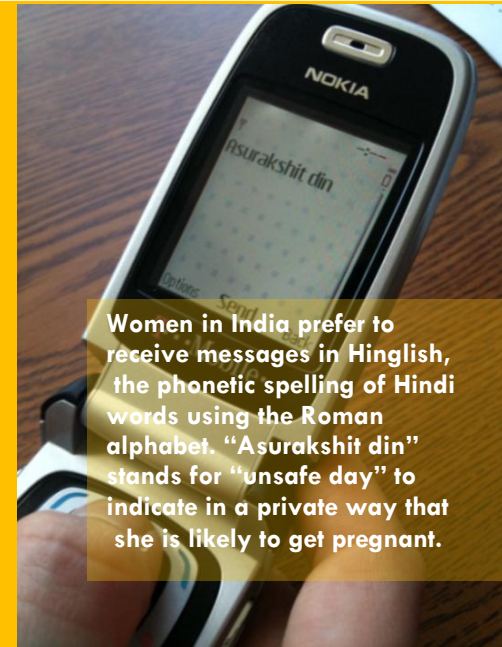
CycleTel™: Effective Family Planning via Mobile Phones

An mHealth service created by Georgetown University's Institute for Reproductive Health

CycleTel™ is a unique mobile health (mHealth) service that offers a family planning method directly to a user's mobile phone via Short Message Service (SMS). CycleTel is based on the Standard Days Method® (SDM), a fertility awareness-based method that helps a woman know which days during her menstrual cycle she is most likely to become pregnant. SDM has been proven to be more than 95% effective in preventing pregnancy when used correctly.

CycleTel helps a woman determine if she is eligible to use SDM by asking a series of screening questions via SMS. If yes, it then sends personalized messages about her fertility status, in addition to messages that support correct use of SDM. CycleTel depends on sustained interaction between the user and technology for as long as the woman chooses to use the service.

Georgetown University's Institute for Reproductive Health (IRH) has followed a step-wise, systematic approach to CycleTel development, which has proved critical in planning for scale up and sustainability. IRH conducted rigorous proof-of-concept and pilot testing to develop and evaluate the service. Research results and industry analysis informed the development of a business plan and go-to-market strategy for CycleTel. IRH is currently exploring partnerships to launch CycleTel in India and other countries worldwide.



Women in India prefer to receive messages in Hinglish, the phonetic spelling of Hindi words using the Roman alphabet. "Asurakshit din" stands for "unsafe day" to indicate in a private way that she is likely to get pregnant.

PROOF-OF-CONCEPT

IRH completed a proof-of-concept testing in Lucknow and Delhi, India. The testing included the following three phases and results:

1. Focus group discussions established mobile phone usage trends and interest in CycleTel (n=54).
2. Cognitive interviews tested understanding of the message content with individuals (n=18).
3. Manual testing of the application with actual users contributed to product development. Manual testing was automated and monitored with support from FrontlineSMS (n=114, with 99 completed exit interviews).

Interviews with women who tested CycleTel showed that:

- Users liked CycleTel as a family planning method for its ease of use, convenience, and lack of side effects.
- The majority felt it was easy to communicate with their husbands about the unsafe days; about 70% of users showed their husbands CycleTel messages.
- 92% were very satisfied with CycleTel as a method to prevent pregnancy.
- 100% would recommend the service to others.
- 35% of participants called the helpline, and helpline calls decreased after one cycle of use.
- 86% said they would be willing to pay on average Rs. 33 per month for the CycleTel service, ranging from Rs. 15-400. Note: sending one SMS in India costs less than Rs1.

Positive proof-of-concept results validated an investment in technology development for CycleTel.

THE TECHNOLOGY PLATFORM

IRH, working in partnership with global technology consultant, ThoughtWorks, Inc., designed CycleTel to function on an automated technology platform that:

- Communicates with a designated long-code and utilizes keywords;
- Allows users to opt into or out of the service;
- Screens each new user with a series of messages to determine if the service is appropriate for them;
- Tailors messages based on when each user can begin using the service, i.e., when she begins her period;
- Sends messages according to user's preferences (e.g., on all fertile days or select fertile days); and
- Is designed to operate at scale, across multiple countries, carriers and languages, for continual, long-term use (until the user chooses to discontinue use).

Given the critical importance that the service functions correctly, the platform operates in an environment that includes or is capable of:

- Real-time, privacy-protected data collection that is stored in a central database, accessible online;
- Around-the-clock application management and network monitoring; and
- A robust and secure hosting infrastructure.
- The platform automatically tracks indicators to support monitoring and evaluating efforts. Example indicators include: the number of eligible/ineligible users; the number of actual users; cycle length variation over time; and the number of invalid messages sent by users that may indicate issues with the wording of messages sent.

PILOT TESTING

Once the CycleTel technology platform was built, IRH recruited 715 women in the Delhi region to test the automated version of CycleTel for two menstrual cycles. The purpose of the pilot test was to: 1) ensure that the automated technology functioned properly with a higher volume of users; 2) evaluate user experiences with the service and integrate user feedback before scaling the technology; and 3) test the feasibility of integrating the CycleTel helpline into a fully-functioning family planning call center, which included training the call center counselors and integrating a technology interface to link the call center MIS and CycleTel user database.



Women reported showing their husbands the “unsafe day” alerts to help manage the fertile days.

The pilot phase afforded IRH and ThoughtWorks the opportunity to identify technology issues and improve the daily functioning of the service, as well as to add additional features based on feedback from users and project administrators. For example, the CycleTel database now generates a user status report which is used for monitoring the service.

Similar to the proof-of-concept results, over 95% of users interviewed at exit (n=653) reported that they received messages at an appropriate time and in an appropriate quantity, indicating that the technology worked as designed. When asked what they liked most about CycleTel, more than 80% of users reported appreciating its ease-of-use and the timely reminders. Nearly 90% of women and 80% of men

interviewed (n=131) said that they would recommend this service to others.

About 230 calls were placed to the helpline by users to report issues with sending, receiving, and understanding messages. The majority of calls were received during user registration, and tapered off to less than 7 calls per week towards the end of the testing. The call center was appropriately able to resolve most queries with support from data provided through the CycleTel MIS.

PLAN FOR SCALE AND SUSTAINABILITY

Following pilot testing, IRH worked with a leading business consulting firm in India to develop a business plan and go-to-market strategy for CycleTel. The business plan maps how CycleTel can scale and become a sustaining mHealth service in India by 2017. Strong interest in CycleTel has been expressed by mobile network operators, telecom aggregators, donors, technical assistance organizations, and others in the global health and technology communities, and discussions are underway with potential go-to-market partners. IRH aims to launch CycleTel in India by late-2012 and expand the service to other countries worldwide.

Additionally, IRH is testing the feasibility of building out an interactive voice recording (IVR) component of the service, which would make CycleTel appropriate and accessible for millions of women and couples at the Bottom of the Pyramid who have an unmet need for family planning but for whom texting can be challenging.

IRH’s systematic and rigorous approach to CycleTel development and deployment—including the proof-of-concept, pilot testing, technology development/iteration based on user feedback/needs, and business planning—is a model in the mHealth field that other organizations can apply to plan for the scale and sustainability of other mobile services.

CycleTel is now well-positioned to expand access to family planning in a new way—by offering effective family planning directly via mobile phones.

CONTACT US

Interested in a partnership with IRH or want more information about CycleTel? Contact irhinfo@irh.org or info@irh.in.

The Institute for Reproductive Health at Georgetown University contributes to a range of health initiatives and is dedicated to helping women and men make informed choices about family planning and providing them with simple and effective natural options. For more information, see www.irh.org or www.irh.in

This publications and the project featured were supported by the U.S. Agency for International Development under Cooperative Agreement HRN-A-00-97-00011-00.

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