

A photograph of a woman in traditional Indian attire, including a patterned sari and jewelry, talking on a mobile phone while holding a baby wrapped in a cloth. The background is a textured, light-colored wall.

MOBILE PHONES FOR SOCIAL & BEHAVIOUR CHANGE

A COMPENDIUM OF 100+ INITIATIVES IN INDIA

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Written by: Ritu Srivastava & Arjun Sen
Edited by: DEF Editorial Team

Secondary Research by: Rahul Choudhary & Bijo P. Abraham
Concept, Design & Layout by: Sapna Subba & Kapil Verma

Contact
Digital Empowerment Foundation
House No. 44, 3rd Floor,
Kalu Sarai, New Delhi – 110016, India
Tel: +91-11-26532786

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**MOBILE PHONES FOR SOCIAL &
BEHAVIOUR CHANGE**

Acknowledgement

The rapid growth of mobile telephony has significantly changed the traditional way of communication. As an affordable and accessible means of communication, even rural communities have realised the potential of mobile telephony to create economic opportunities and strengthen their social networks. Mobile phones, by virtue of their role as carriers and conduits of information, ought to lessen the information asymmetries in markets, thereby making rural and undeveloped markets more efficient. It is no longer just an audio communication tool but enables access information anywhere and anytime. It offers means for collecting information and sensing behaviour as well as for the presentation of recommendations.

According to a IAMAI-KPMG report, India will have 236 million mobile Internet users by 2016, and mobile Internet userbase will reach 314 million by 2017. Used as a publishing and communication tool, it enables millions around the world to communicate instantly, gives the common citizen a voice among an audience of millions and serves as a huge multimedia library of information. There are increasing number of mobile-based projects, and the government, bilateral agencies, private sector players, and the civil society continue to invest in mobile-based practices that can provide local solutions in local context and problem areas.

Given UNICEF's focus on sustainable and effective communications for development thrust involving the isolated and vulnerable groups, mobile application-based services are likely to prove valuable in achieving programming goals. Apart from connectivity and access for the deprived groups and communities, mobiles provide cost-effective interventions, enable to overcome bottlenecks to access and deliver services, and enable communities to maximise the impact of available

resources. Keeping this in mind, Digital Empowerment Foundation (DEF) and UNICEF India initiated a project, 'Mobiles for Social and Behaviour Change (MSBC)', to dive into the depth of various projects where mobiles are being effectively used by frontline workers in areas of health, education, nutrition, child protection, and monitoring & training of frontline workers. This project aims to study concerns around MSBC and create a formidable platform to provide knowledge on diverse MSBC implemented projects and help in developing partnerships between state governments and MSBC players.

This compendium is a compilation of over 100 such mobile-based initiatives around education, health, civic participation, socio-economic development and disaster management well within the central focus of Millennium Development Goals (MDGs). We further aim to understand these mobile-based interventions broadly into three categories – information & dissemination; monitoring & tracking, and support to frontline workers.

We thank colleagues Ritu Srivastava and Arjun Sen for compiling and reviewing these practices. We must also acknowledge colleagues Pawas Suren, Rahul Choudhary, Maubani Dutta and Bijo Abraham for their efforts on verifying these projects. We acknowledge UNICEF India, led by Mario Mosquera and supported by Alka Malhotra, for their invaluable suggestions. The compendium has over 100 mobile-based projects, which use mobile as a tool, platform and carrier of information and content for dissemination, tracking of development schemes and programmes, maintaining timetables and sending progress reports and training and support to frontline workers.

This compilation has been made, designed and printed with much care. However, readers excuse and forgive any errors and mistakes that may have occurred unintentionally.

Wishing you a thought-provoking reading!

UNICEF India



Mario Mosquera
Chief
Communication for Development (C4D), UNICEF India

Digital Empowerment Foundation



Osama Manzar
Director
Digital Empowerment Foundation

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List of abbreviations

1. ASHA: Accredited Social Health Activists
2. ANM: Auxiliary Nurse Midwife
3. AWW: Anganwadi Workers
4. TT: Tetanus Toxoid
5. IVRS: Integrated Voice Recording System
6. IMR: Infant Mortality Rate
7. MMR: Maternal Mortality Ratio
8. ANC: Ante-natal care
9. PNC: Post-Natal Care
10. CVD: Cardiovascular disease
11. HEWs: Health extension workers
12. RMHCs: Rural Micro Health Centres
13. VHPs: Village Health Providers
14. NRHM: National Rural Health Mission
15. NIC: National Informatics Center
16. SWI: Sesame Workshop India
17. ICDS: Integrated Child Development Scheme
18. SNCU: Sick Newborn Care Units
19. CDSS: Clinical Decision Support System
20. CMS: Content Management System
21. MUAC (Mid-upper arm circumference measurement)
22. Estimated Date of Delivery (EDD)
23. Short Message Service (SMS)
24. BCC Behaviour Change Communication
25. BEmONC Basic Emergency Obstetric and Newborn Care
26. C4D Communication for Development
27. CCMN Community Care of Mothers and Newborns
28. CEmOC Comprehensive Emergency Obstetric Care
29. CHARM Chief Minister's Initiative for Attainment and Realization of MDGs
30. CHC Community Health Center
31. CHW Community Health Worker
32. COMBI Communication for Behavioural Impact
33. eHealth Electronic Health
34. EmONC Emergency Obstetric and Newborn Care
35. FHD Family Health Division
36. IEC Information, Education, Communication
37. MCH Maternal and child health
38. MDGs Millennium Development Goals
39. mHealth Mobile health
40. MMR Maternal Mortality Ratio
41. MNCH Maternal, newborn and child health
42. MPDR Maternal and Perinatal Death Review
43. MWH Maternity Waiting Home
44. NCMS New Cooperative Medical Scheme
45. NGO Non-governmental organization
46. NRHM National Rural Health Mission

Introduction

Mobile technology is currently emerging as the first extensive form of electronic communication system in many regions of developing countries. Today, mobiles have evolved into much more than communication devices. Its new services such as data services, agricultural inputs, health care, money transfer and employability-based services have shown enormous economic and development benefits in most developing countries, including India.

The mobile opportunity has been egalitarian. The “m” factor has given a paradigm shift to government, start-ups and enterprises in all sectors to come closer to the citizens while delivering information and services on mobile. e-Governance services are now redefined as m-Governance to bridge administration-citizen gaps. Similarly, e-Commerce is now continuously being rejigged with new forms, mechanism and channels to bring new forms of content and services for their consumers. Mobilebased value added services (MVAS) has become an economic formula for mobile technopreneurs to add value to business networks and make services more lucrative.

The expanding social space of mobile technology has accelerated the processes of infrastructure development and deployment of networks, provided better services and widened the basket of service delivery. Emergence of this technology has changed the concept of empowerment – it is not limited to economic but also social and cultural empowerment. Widening space of mobile has attracted “communication for development” researchers to add “mobile” as a new platform for exercising “communication” within communities and individuals. There are new trends among communities and decision makers at local, national and regional levels who are using mobile phones for civic participations and engagement. Over a period of time,

personal behavioural changes have been reflected in citizens and communities' attitude, level of confidence, decision making, creation of new ideas and way addressing their issues at various levels. It is further linked to their interpersonal behavioural-led changes due to mobile connecting two groups of people, two individuals, and so on, thus, overcoming physical and distance barriers. This newfound technology has enabled us to share and receive information in shortest time frame without going anywhere. The new form of sharing and receiving content, knowledge and experiences in the form of text messages, video-based messages and podcasts was unimaginable a decade back. This personalised device has given freedom and liberty to inform and communicate in order to strengthen personal, familial, social and economic relationships.

In June 2015, India crossed 980 million mobile users and 213 million users were using Internet through their mobile phones registering a CAGR (Compound Annual Growth Rate) of 27.8 per cent, according to a recently published IAMAI and KPMG report. Mobile Internet users in rural India are likely to grow to 53 million by June 2015. However, the smartphone penetration is quite low in rural areas in comparison to the urban landscape. Growth of low-cost smartphones coupled with low mobile tariffs has enabled rural users to strengthen their democracy, enhance their health care services and enable better management of natural resources. New mobile-based projects are emerging every day, focusing on education, health, livelihoods, agriculture, financial inclusion, water & sanitation, and environment matters in India. Most of them are being experimented by civil society groups and bilateral agencies to meet social and developmental needs of specific communities while private stakeholders and government support them in many instances. These projects are primarily focused on either delivery of service or monitoring of services for providing support to frontline workers.

In order to understand how communities and frontline workers are using mobiles for information dissemination, reporting and monitoring of services and interpersonal communication, UNICEF India and Delhi-based NGO Digital Empowerment Foundation (DEF) initiated a project 'Mobiles for Social and Behaviour Change (MSBC)' The first phase of the project was launched in 2013 with a two-day consultation on 'Mobile Phone as a Tool for Social & Behaviour Change' at New Delhi. Twelve projects were invited for the consultation to explore the concept of 'mobile as a communication tool for development'

The recommendation of the first phase is to conduct deeper research to understand these projects, create more concrete partnerships between project stakeholders and the state government, so that each state can adopt and implement the MSBC project at higher scale.

On the basis of this recommendation, UNICEF India and DEF extended their partnership for MSBC

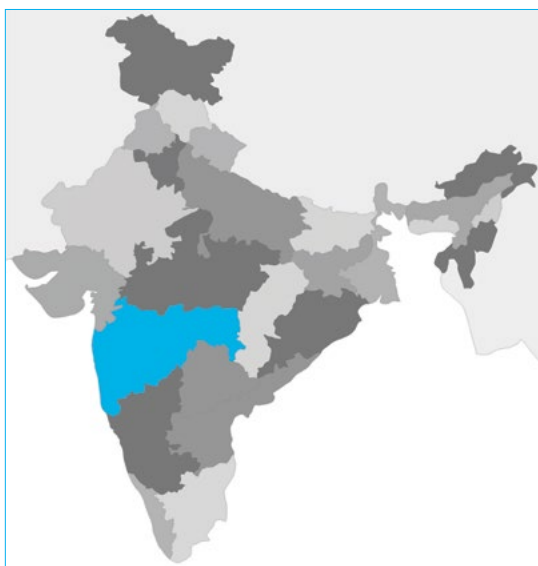
Phase II in 2014. This meant going a step further into the issues around MSBC and creating a formidable platform to provide knowledge on diverse MSBC implemented projects. The prime objective of Phase II was to – (1) organise state-level consultation that could bring in local MSBC projects for deliberation and the state government could forge partnership with local MSBC to scale up at wider level; (2) conduct deeper research on MSBC projects on their usage of mobiles for social and behaviour change (SBC) in India, both for referential value and for advocacy purpose; (3) develop a directory of MSBC projects beyond their participation at five state consultations that can be used for referential purpose and advocacy.

This directory has a compilation of over 100 such mobile-based projects that evolve around addressing various issues and provide solution-based tools to various ongoing challenges around women, adolescents, youth, girls, children and sectors across health, education, nutrition, and empowerment. This compendium can be further used for referential and advocacy purposes. Some of the projects have been further researched and analysed. The bigger thinking of compiling over 100 projects is to explore how mobiles can drive desired social and behavioural changes among millions of Indians. This can also be a turning point in bringing much needed social stability, which in turn will drive stable and sustainable economic activities.

MOBILES FOR INFORMATION & DISSEMINATION

Information dissemination is a proactive information service designed to educate and inform focused groups of users on social, economic and educational issues, problems, and opportunities of interest to them. It requires systematic planning, collection, organization, and storage of information for its delivery to the target audience using different media and communication means. The importance of information dissemination is in raising the social and economic status of focused groups including their survival and self-development through need based technical skills and educational programmes.

With more than 980 million mobile subscribers in India, mobile phones are certainly emerging utility tool for information dissemination. The efforts towards information push for information dissemination to millions finds greater resonance in mobiles as instrument of information decentralization and most democratic information channel that capture mobility-specific requirements cutting across cultures and geographies.



Mobiles for information & dissemination

mMITRA (mobile friend) Voice Call service

Organisation
Armman

Project Location & Coverage Area
Solapur, Osmanabad and Washim districts, Maharashtra

Project URL
www.armman.org/mmitra

Area of intervention
Health & Nutrition

A friend for mother and child

Access to information during pregnancy and infancy in rural India may be a challenge. Even though there are a few mobile applications that address this issue, they are often inaccessible for women who are illiterate, lack emotions and cultural specificity. In November 2013, a non-profit organization Armman, headed by Dr. Aparna Hegde, launched a voice call service using mobile phones to disseminate information about prenatal and neonatal health care among semi-literate and illiterate underprivileged urban and rural women.

The project mMitra (Mobile Friend) was launched in partnership with private pharmaceutical company Glenmark and the state-owned Lokmanya Tilak Municipal General Hospital, Sion, Mumbai, popularly known as Sion Hospital.

mMitra chose to adopt a voice call service to overcome the inability of the targeted women to read texts – SMS or otherwise. mMitra uses user-friendly, emotionally and culturally location specific voice messages.

Trained health agents (Arogya Sakhis) involve the community and enroll pregnant women and their families. Using local dialect, the voice calls are short one-minute messages clubbed with animations that can be accessed through ordinary low-cost feature phones.

The voice calls are spaced out on the basis of the initial data at the start of pregnancy and expected delivery dates and have been developed and validated by the Federation of Obstetrics and Gynecological Societies of India (FOGSI).

A voice call service using mobile phones to disseminate information about prenatal and neonatal health care

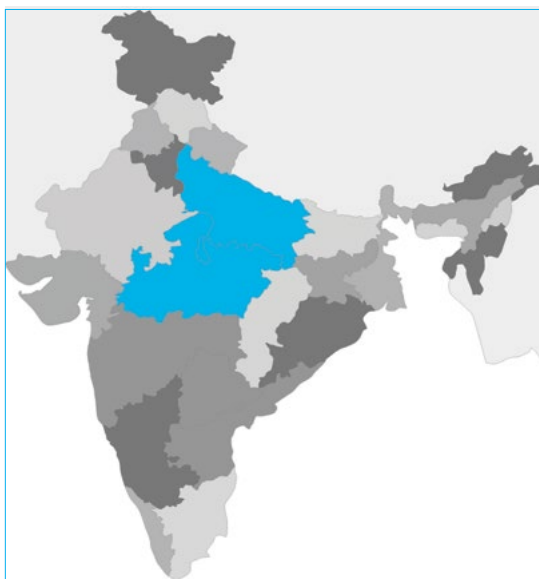


They offer timely information to users on preventive care and simple interventions, basic hygiene and nutritional needs, spotting dangers during pregnancy and family planning.

Reach & Road Ahead

Started as a pilot project in three districts of rural Maharashtra - Solapur, Osmanabad and Washim, the project has scaled up to reach the grassroots with the help of NGO partners in Khandwa, Madhya Pradesh, Sangner, Rajasthan, slums of Andheri in Mumbai, Maharashtra, Solan District, Himachal Pradesh and the slums of Kibera, Nairobi and Kenya.

The project sustains itself largely through online donations, government funding and private parties through its various fund raising campaigns using social media. mMitra uses two key channels for enrolling women in the programme-government municipal hospitals, and directly from the community. The project is affordable for the lower middle class; it costs USD 150 to receive and send 145 voice calls pregnancy to the infancy. Users need to pay Rs. 417 for 21 months to send and receive voice calls. So far, the project has managed to enroll 1,800 women and is presently enrolling about 100 women per week.



Mobiles for information & dissemination

GalliGalli Sim Sim, Radiophone

Organisation

Sesame Workshop India

Project Location & Coverage Area

Madhya Pradesh, Uttar Pradesh & New Delhi

Project URL

www.sesameworkshopindia.org

Area of intervention

Education

Sim sim, a new concept for teaching

Children living in rural areas of India continue to be deprived of quality education. Gali Gali Sim Sim Radiophone Project by Sesame Workshop India (SWI), launched in 2011, is trying to provide quality education to children specially who are living in suburbs and rural regions of the country.

The radio show used the content of the popular TV show of the same name which was based on the American TV show Sesame Street. In collaboration with Qualcomm Inc., Schwab Charitable Fund, and HSBC, SWI chose to create an audio format of the TV show content as penetration of TV in rural areas was only about 33 per cent whereas penetration of radio was about 80 per cent due to advantages and easy accessibility of radio sets and mobile phones.

The Radiophone Project to reach children and parents in rural areas with a radio show called Galli Galli Sim Sim. The objective was to make education accessible and to ensure that children are not pulled out of schools. The purpose of this project was to reach out to children aged two to eight years in migrant labour communities in rural areas with messages around language and literacy, math and reasoning, health and nutrition, environmental awareness, social and emotional health. The main components of the Radiophone project were: “The development and broadcast of high quality educational radio content relevant to and reflecting community issues, especially those of marginalised communities; enabling increased access of this content to communities through integration with a 3G enabled platform; and an in-school programme that leverages the radio broadcast within school learning materials”

The Radiophone Project to reach children and parents in rural areas with a radio show promoting healthy behaviour like hand-washing and good nutrition

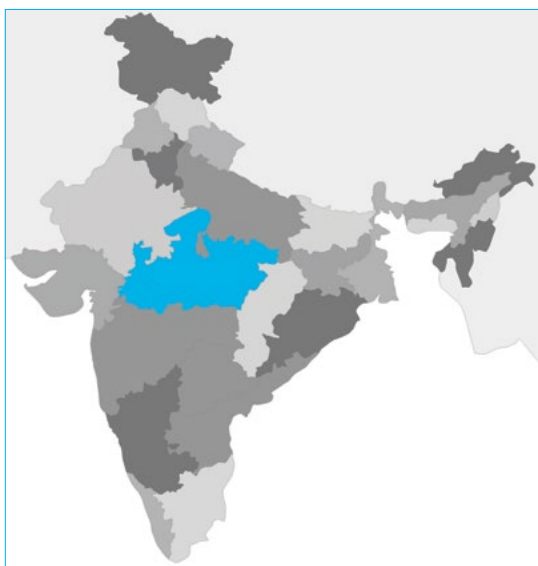


Galli Galli Sim Sim (GGSS) radio shows include stories, songs and call-and-response interactions that get children out of their seats to clap, stomp and repeat aloud – and learn in the process. Episodes promote healthy behaviour like hand-washing and good nutrition, which is crucial in areas with high rates of childhood mortality. Results from a study shows that children exposed to GGSS showed more than three times improvement as compared to the control group in vocabulary and ability to tell a story, and showed four times higher awareness on importance of issues like garbage disposal and water conservation.

Reach & Road Ahead

The SWI broadcast the show through 10 community radio (CR) stations across Uttarakhand, Haryana, Himachal Pradesh, Madhya Pradesh and Uttar Pradesh to reach more than 1.4 million people. The programme can be taken to any Hindi speaking state which has financial support to broadcast and facilities like Radio Over Telephone.

The Radiophone Project came to an end in 2013, but CR stations are still continuing to use the content. The project was entirely funded by partners. However, if more CR stations start using the content, the project can become self-sustaining by charging an affordable fee from the CRs.



Mobiles for information & dissemination

Voicenet (Voice based information transaction system deployed for ICDS)

Organisation
Uniphore & RTBI

Project Location & Coverage Area
Dhar and Gunawat Districts, Madhya Pradesh

Project URL
health.rtbi.in/initiatives.php#seven

Area of intervention
Health

Monitoring & assessing the malnutrition status

The World Bank has estimated that India is one of the highest ranking countries in the world for the number of children suffering from malnutrition. The government of India has initiated many programme to tackle the problem of malnutrition but monitoring and assessing the malnutrition status is a challenging task.

The Integrated Child Development Scheme (ICDS) is an Indian government initiative aimed at combating malnutrition and improving maternal and child health through providing children with supplementary nutrition packets, monitoring their weight to detect faltering growth and assessing nutritional status.

However, the paper-based process of data collection proved to be a problem as it failed to provide timely and accurate data needed for ensuring success. Professor Ashok Jhunjunwala of the Indian Institute of Technology in Madras (IIT-M) and Chair of the Rural Technology and Business Incubator (RTBI) was asked to find a solution. Professor Jhunjunwala recognised that the target population for this programme was mostly illiterate, so the solution would have to be voice-based and available in local languages. He turned to RTBI incubated Chennai-based Uniphore Software Systems for the company's VoiceNet platform which used a Personalised Voice based Information Retrieval and Transaction System (PVIT) integrated with mobile phones with verification and local-language voice-recognition. Uniphore and RTBI collaborated to define and develop a customised solution for ICDS using this system.

Providing children with supplementary nutrition packets and monitoring their weight to detect faltering growth and assessing their nutritional status

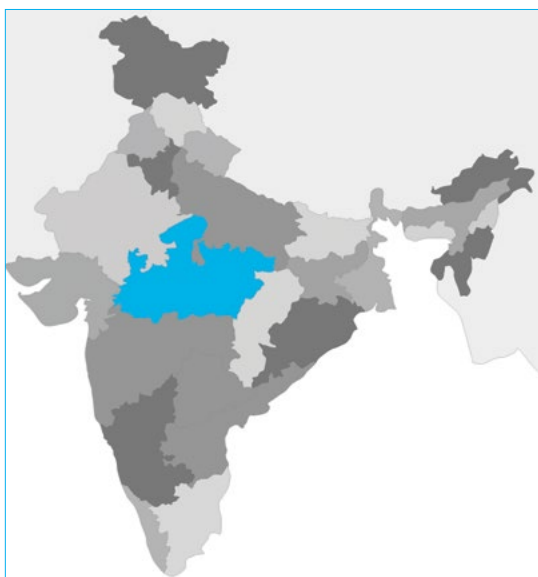


The application was first introduced as a pilot project in Anganwadi centres (rural health care outreach centres) in Madhya Pradesh. The process is simple: After enrolling herself in the mobile based voice biometric system, a mother uses the application on her mobile phone to authenticate her identity and vocally enter information about her child's health and the benefits she has received from ICDS. This data is immediately uploaded on a web portal, where the administrators view it in real-time. This Web portal stores all the information regarding the child's weight, supplementary nutrition packets received, immunisation schedules, growth charts, etc.

Reach & Road Ahead

The implementation of the solution had immediate and enormous impact: information was accurate, the process was transparent, and follow-up was immediate. The enhanced data collection process enabled better service delivery and more efficient operations.

The project is, however, languishing due to lack of funds to study and check the feasibility and sustainability of the project. The project is scalable in terms of customising its features depending on geography, culture, and user group and can include more and more local languages.



Mobiles for information & dissemination

Sampark Setu Yojana

Organisation

Department of Health and Family Welfare, Madhya Pradesh Government

Project Location & Coverage Area

Madhya Pradesh

Project URL

www.health.mp.gov.in/e-health.htm

Area of intervention

Health

Connecting front line workers

The problem of lack of professional health service providers in rural areas has been an area of discussion in India since the 1960s and to connect and receive real-time feedback from healthworkers is a challenge.

In January 2013, the Madhya Pradesh government launched the Sampark Setu Yojana to connect all 90,000 health workers in the state to doctors and district and state-level health officials using various features of mobile phones such as SMS, Voice Calls, etc. The state government distributed 77,000 SIM cards to Auxiliary Nurse Midwives (ANMs), Accredited Social Health Activists (ASHAs), other grassroots health workers, doctors and district health officials for this purpose.

The objective was to have a simple interactive communication and monitoring platform to ensure that grassroots field workers could carry out important instructions and mandatory health protocols in a timely way to ensure better health service delivery.

The mobile-based system covers all 51 districts and 52,000 villages in the state through features like a Facebook group of 'Team Health' having over 8000 primary and 800,000 secondary members and linking all the districts and blocks via Skype and a Closed User Group. In addition, websites were also developed for information dissemination to the community and the health workers. The scheme also had software to enable live CCTV coverage of Sick Newborn Care Units (SNCU) across the state. The entire project includes 12 different software(s). Also, using mobiles, directives and guidelines are sent directly to health workers through SMS from time

Using mobile phones to ensure that grassroots field workers carry out important instructions and mandatory health protocols in a timely way to ensure better health service delivery

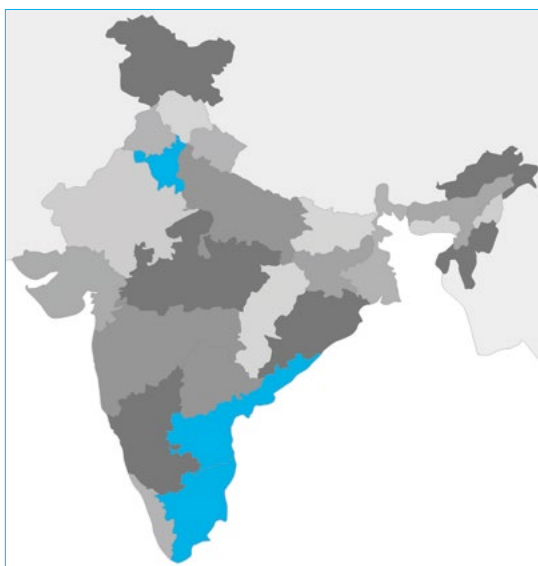


to time. The SIM cards enable users to talk to other users for an unlimited period of time.

Reach & Road Ahead

The state has now achieved 86 per cent institutional deliveries, greatly safeguarding the lives of mothers. The use of mobile phones for awareness generation has led to a better understanding of health schemes. It has also improved adherence to protocols and improved service delivery, leading to increase in footfalls in public health facilities from about 0.2 million per day in 2013 to more than 0.5 million per day now.

The system facilitates daily and weekly monitoring of health service delivery to almost 0.6 million people every day and almost 30,000 pregnant women and infants. The programme has facilitated 100 percent seamless distribution of drugs to almost 0.4 million people per day, provision of free diagnostics to 50,000 people per day and provided free transport facilities to 30,000-35,000 pregnant women and others.



Mobiles for information & dissemination

BridgelT India

Organisation

EZ Vidya Private Limited and Nokia (Microsoft)

Project Location & Coverage Area

Andhra Pradesh, Tamil Nadu & Haryana

Project URL

bridge-it.in/wordpress

Area of intervention

Education

High quality pedagogic content in rural classrooms

Majority of 20 million primary and secondary schoolgoing children in India are living in rural areas, spread over 600,000 villages. The Indian education system has not achieved strong learning outcomes for reasons that are as diverse and nuanced as the country itself. Key among these reasons is poor teaching quality and slow adaptation of new methodology and technology in engaging students in the classroom.

In 2011-12, Chennai-based EZ Vidya in partnership with Nokia, The Pearson Foundation, and Government Education Boards launched the BridgelT India project. The objectives of BridgelT India were to integrate the mobile platform into teaching, evaluate its effectiveness through teachers' experience of using it in the classroom and engaging them digitally; evaluate students' learning improvements because of using mobile technology, content, and methodologies into the teaching processes and; to scale up to broaden the impact of mobile technologies in education, evaluate sustainable models, and identify how to scale at low increment cost.

The project involves the use of mobile phones to deliver high quality pedagogic content in rural classrooms of government schools. Teachers of English and Science in grades V and VI are given 3G-enabled Nokia C7 loaded with customised Nokia Education Delivery (NED) software. This enables teachers to access a library of videos through the NED server. Teachers select and download videos that can then be shown to their students, by connecting the phones with display devices in the classrooms. A cloud hosted NED server is maintained by EZ Vidya for uploading the AVs from where the users (teachers) can download the AVs and place

Use of mobile phones to deliver high quality pedagogic content in rural classrooms of government schools



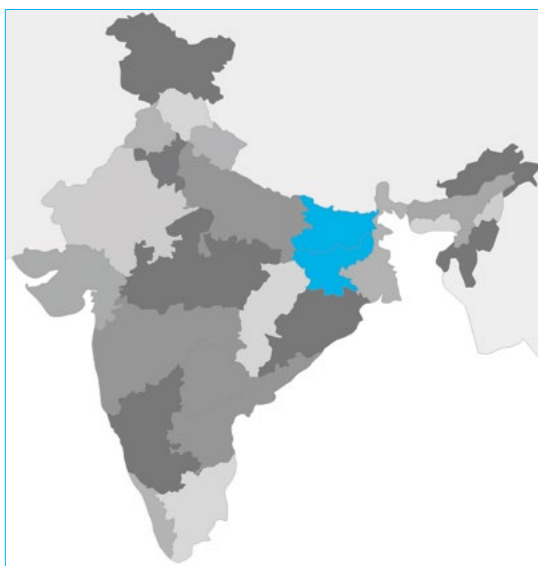
them in the respective catalogs in NED application in mobile phone. Bridge IT generates its materials mainly through working with Pearson Foundation and Government Education Boards. They train local teachers to disseminate the content which is mapped to their syllabus. The project is affordable for schools to incorporate. So far, BridgelT has created 539 videos for teachers of English and Science, suited to the local curriculum.

Reach & Road Ahead

Today, 300 teachers (70 per cent women) of 160 government schools in rural areas of Tamil Nadu, Andhra Pradesh and Haryana are using mobile phones to teach more than 12000 students. Apart from the initial training of teachers, professionals visit schools during the year to participate in live classrooms and discuss challenges with teachers to jointly arrive at possible solutions.

Implementation of the mobile-based intervention has helped to change the teaching style from direct instruction to more student-centered learning. This has led to a dramatic improvement in motivation levels, interest levels, listening and speaking skills of students. The quality of teaching has improved by 31 per cent.

BridgelT is effective at a very low cost of USD 1.56 (Rs. 95/-) per child per year. According to EzVidya, the project has proved that it is possible to use mobile phones with right pedagogic approaches to produce a strong, positive and statistically significant effect across a large number of classrooms in India at a lower cost per student than previous computer-based interventions.



Mobiles for information & dissemination

Mobile Vaani

Organisation

Gram Vaani

Project Location & Coverage Area & Coverage Area

Jharkhand and Bihar

Project URL

www.gramvaani.org

Area of intervention

Empowerment

A voice-based social media platform

Deeply concerned about the widening digital divide in India, where 70 per cent of India’s population was muted into silence because of lack of affordable technology and was excluded from reaping the benefits of the ‘Information Age’, Aaditeshwar Seth, a professor of computer science at IIT Delhi, founded GramVaani in 2009.

Gram Vaani (meaning ‘voice of the village’) is a Delhi-based social technology company. Incubated at IIT-Delhi, the company started with the intent of becoming the world’s first bottom of the pyramid social media platform reversing the flow of information making it bottom-up instead of top-down. Using simple technologies and social context to design tools, the company has been able to impact communities in significant ways - more than two million users in over 20 Indian states.

Gram Vaani launched the Mobile Vaani project in 2012 to create a voice-based social media platform using mobile phones in rural areas where an Internet connection may be limited. The platform encourages social development through the use of a low cost Interactive Voice Response System (IVRS) that allows people to call and share concerns and comments over mobile phones and the web. People have to give a missed call to 08800097458 and the server calls them back. The IVR gives them options to leave a message and hear a message.

Users can also listen to messages left by others. Content is then moderated locally and published on the IVR website where governments, NGOs and social enterprise partners can view the conversations. The network gets 2,000 calls a day and has more than 35,000 users in Jharkhand. The content is a mix of folk songs and tales, poetry, questions and answers,

A low cost Interactive Voice Response System (IVRS) that allows people to call and share concerns and comments over mobile phones and the web



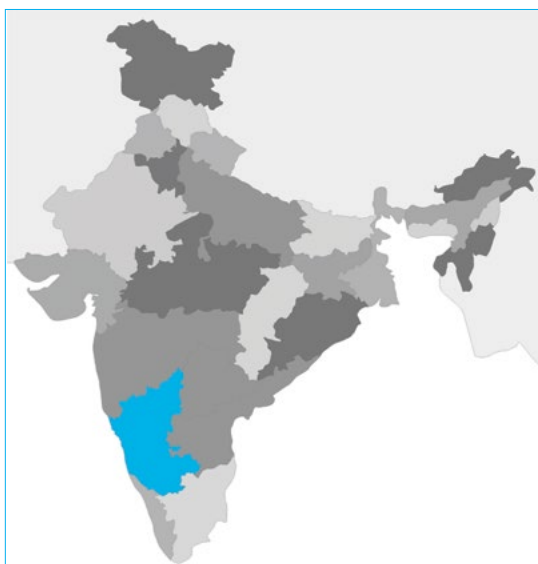
discussion and classified. Mobile Vaani has 22 community representatives working in the field in various districts of Jharkhand. They reach out to the villagers, organise meetings where they not only discuss social issues but get a chance to sing folk songs or fables.

Reach & Road Ahead

The business model followed is a simple one based on local agents, who enrol people on the network and collect advertisements from entrepreneurs. They get to keep a certain amount of the money from the bookings. These agents also help in acquiring other agents and conducting their training. They can earn INR. 8,000-12,000 a month. GramVani has also plan to join hands with telecom operators to lower the cost of calls.

At present by using the system, 30 rural community radio stations are managing and sharing content over mobiles and the web. Because of Mobile Vaani, corrupt ration shop officials in Jharkhand have been arrested, women sarpanches in Uttar Pradesh are sharing learnings and opinions, and citizens are monitoring waste management in Delhi.

Working with partners, Mobile Vaani has run mediated voice-based social media campaigns using mobile phones on issues such as early marriage, domestic violence, maternal health – preparedness and entitlements, family planning, sex selection, state of health services, rural-urban migration and the working of the MNREGA. Gram Vaani is currently working with over 70 organisations to engage with almost a million households across 20 states in India. Apart from India, Mobile Vani is also working in Afghanistan, Pakistan, Namibia, and South Africa.



Mobiles for information & dissemination

Next Drop

Organisation

Next Drop

Project Location & Coverage Area

Hubli and Bangalore, Karnataka

Project URL

www.nextdrop.org

Area of intervention

Water and Sanitation

Improving water delivery in Hubli

Nearly one million people in the city of Hubli in Karnataka get water from the Karnataka Water Board (KWB) for three to five days a week, for about four hours a day, a situation not unusual considering the scarcity of clean water in India. Water is released by valve-men at odd times throughout the day, which means consumers often have to wait by their taps for hours. Most of the people in the area cannot afford large tanks or wells to store water.

To provide a solution, Next Drop Smart Water Systems Pvt. Ltd., a Bangalore-based for-profit social enterprise, launched in 2011 a mobile phone-linked Interactive Voice Response System which connects the valve-men to the engineers and customers. A customer has to send a missed call to 07795590931 to get his or her mobile phone registered as a subscriber and then the system provides information on water availability to customers 30-60 minutes ahead of schedule via automated calls and text messages and provides information to utility engineers through a web-based dashboard. It uses simple methodology, if any resident of a locality registers for the service by giving miss call, the call centre representative calls back the resident and log the details so as to place under a specific area on dashboard. This area would be mapped to a particular valve.

Therefore, when the valveman next opens the valve, the message is received to NextDrop Service. This message is then forwarded both to the utility, as well as to all the residents covered under the valveman's particular valve.

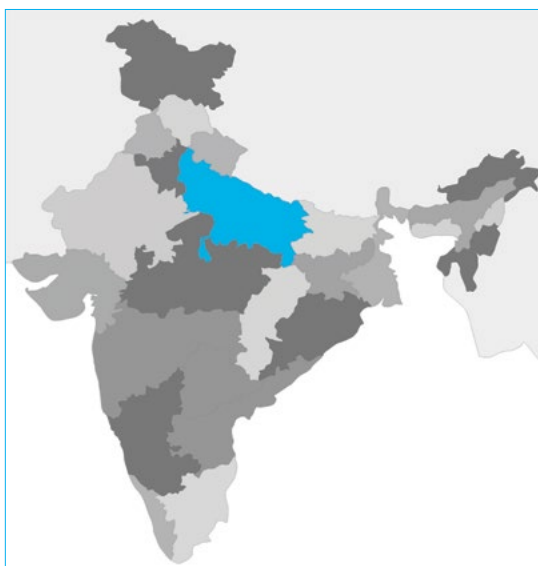
A mobile phone-linked Interactive Voice Response System which connects the valve-men to engineers and customers



It serves water utilities by collecting rich data on true water delivery outcomes and making live data accessible to water utility engineers so that they can quickly identify and address problems. Valve-men measure the level of water in reservoirs every day. NextDrop calls them every hour to get information on the levels. NextDrop then sends the information to the engineers, who decide which areas should get water at what times, and how much, depending on supply. They then text the valve-men, who in turn text the customers and let them know exactly when the water will be released.

Reach & Road Ahead

The project has minimised the time spent waiting for water and allowed consumers, who are basically women and children, to do other productive activities. The project has brought transparency in the water distribution system. In addition, the project has addressed the problems the households face by using unsafe and expensive water, thereby reducing the risk of water borne illness. NextDrop now charges Rs 180 per year for their service, and over 25,000 Hubli households have signed up already. Bangalore One, Government of Karnataka has now tied up with Next Drop for delivering the service. After testing the service in a small city, Nextdrop is ready for a city the size of Bangalore, with its partner Bangalore Water Supply and Sewerage Board. The organization has also received grants from the Bill & Melinda Gates Foundation, Knight Foundation and Google, Clinton Global Initiative University, Centre For Information Technology Research, GSM Association Mwomen Programme, Global Social Venture Competition and Global Social Entrepreneurship Competition.



Mobiles for information & dissemination

Mahila Shakti

Organisation

Human Welfare Association

Project Location & Coverage Area

Chairaigaon, Varanasi, Uttar Pradesh

Project URL

hwavaranasi.in/mahila-shakti-project

Area of intervention

Education

Improving women literacy in Varanasi

The Varanasi region in India is famous for its traditionally skilled artisans and its handloom sarees. However, illiteracy is widespread among women in the area. To improve their socio economic and political situation, the Human Welfare Association supported the program Mahila Shakti – Mobile as an Education Tool for Women Empowerment.

Human Welfare Association (HWA) is a Varanasi based non-profit organisation. In 2011, it launched the Mahila Shakti: A Tool for Women Empowerment with Education Initiatives” project which aims to use digital technologies to improve the quality of living of women from marginalised communities around the city of Varanasi. The project started by providing women from economically disadvantaged families basic education and literacy. This is combined with digital literacy including use of mobile phones, using the simple feature of mobile phone such as keypad to educate women and improve their literacy skills.

Use of mobile phones increases their literacy and numeracy skills and allows them to share experiences with others regarding information on government schemes and other day to day issues. These improvements also boost their confidence and allow them to be more involved in decision-making in their social economic and political realms.

With the support of existing mobile application, women can learn and develop the quality of crunching numbers, mathematics skills and various other subjects. These are in-built features of a mobile device. The system aims to evaluate and analyse a user’s present situation and strength and

Using digital technologies to improve the quality of living of women from marginalised communities around the city of Varanasi



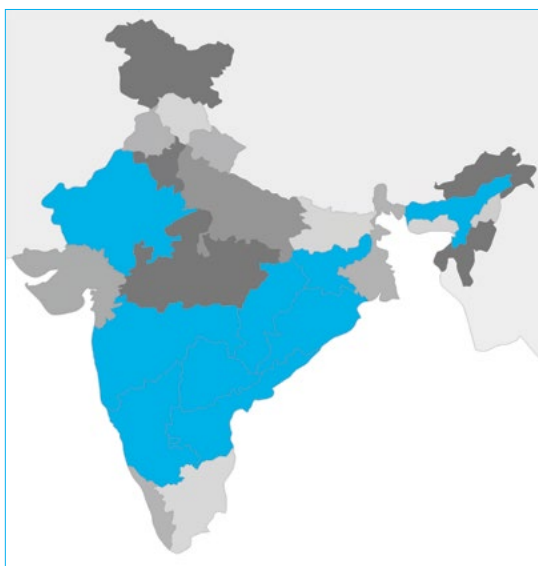
determine a more feasible and appropriate alternative. The process allows them to plan, implement, monitor and evaluate developmental programme and communicate with both NGOs and the government. In educational centers and groups, women learn basic skills they need for their daily business, like reading, writing and calculating.

Reach & Road Ahead

So far, the project has been implemented in 53 villages and benefited 2757 marginalized women. Of these women, 48 per cent or 1938 women who were earning through their own businesses have begun to use mobile phones to expand their business.

Some 1357 women have received proper education in 46 education centres that are run by women who use mobile phones for developmental activities. According to HWA as many as 2071 women, 667 adolescent and 938 children and youth use the mobile phone service of the project for education and for increasing their incomes. Moreover, HWA has formed more than 100 women self-help groups. With support and facilities via mobile technology, women in rural areas can grow in multiple ways, leading themselves and the community to prosperity.

The project is low cost and affordable as most people now have mobile phones. Learning material is delivered over mobile phones. The project also uses tablets and laptops to enable women to become familiar with digital technologies. The project also runs learning centres in different villages.



Mobiles for information & dissemination

Piramal E-Swasthya

Organisation

Piramal Healthcare

Project Location & Coverage Area

Rajasthan, Assam, Maharashtra, Karnataka, Chhattisgarh, Jharkhand, Odisha & Andhra Pradesh

Project URL

www.piramal.com/pharmasolutions

Area of intervention

Health

Telemedicine-based primary health care in Rajasthan

Over 70 per cent of the total population lives in rural areas of the country. There exist disparities between urban and rural geographies in regards to the accessibility of healthcare facilities, due to lack of physical infrastructure and qualified manpower. As a technological solution, e-swasthya has the potential to bridge this divide by providing quality, affordable, accessible health care to rural population. E-swasthya is a social Initiative of Primal Healthcare Limited, a first-of-its-kind telemedicine-based model for providing primary care in Rajasthan, it aims to address the absence of doctors. eSwasthya uses a micro-franchise model to deliver the services of a doctor to the doorsteps of rural population. By deploying state-of-the-art information technologies, eSwasthya rural healthcare delivery model provides quality healthcare access to remote and underserved areas of rural India.

Piramal eSwasthya recruits, trains and deploys Piramal Swasthya Sahayikas (PSS), village based women health entrepreneurs who enable primary healthcare access to rural patients. The Sahayikas who are rigorously trained in healthcare, technology and business invest in setting up a clinic from their homes.

When patients visit with a complaint, a PSS records patient history through a simple one-page form, measures vitals such as blood pressure, temperature, weight and then using a mobile phone calls a remote paramedic based out of a call center in a city (currently Jaipur, India). This process takes close to five to seven minutes per patient.

Through the state-of-the-art information technologies, eSwasthya rural healthcare delivery model provides quality healthcare access to remote and underserved areas of rural India



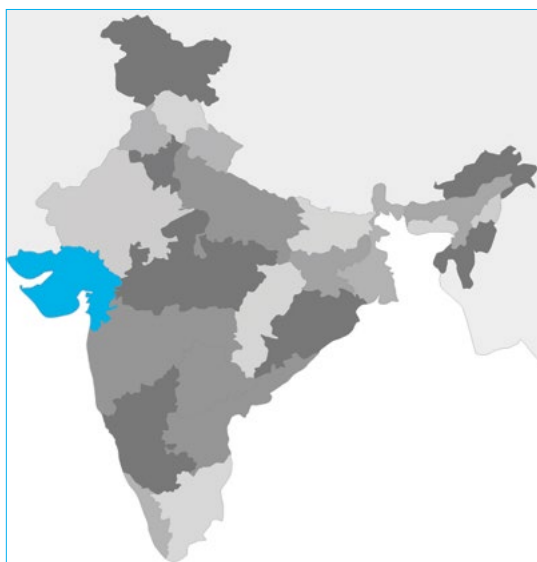
Paramedics use a web-based Clinical Decision Support System (CDSS) to provide provisional diagnosis based on patient history and diagnostic data shared by PSS. The call is then transferred to the doctor for further query, review and approval of the CDSS diagnosis. Appropriate treatment guidelines & protocols are communicated to the PSS. In case the ailment appears serious, the patient is immediately referred to a secondary or tertiary health care facility. Patients pay a nominal fee for the services availed.

The Piramal Swasthya Sahayikas also conduct preventive health workshops, which generate awareness about issues such as hygiene, sanitation, nutrition etc.

Reach & Road Ahead

The PSS Centre is also a village-level pharmacy stocked with medicines necessary to fill the basic prescriptions recommended by the call centre. This model provides reliable, high quality health care at a villager's doorstep through cutting-edge technology developed from sophisticated diagnostic protocols. A doctor takes 45-60 seconds for each caller. This makes the entire process at the call centre to 7 minutes. The total cost of treatment is between Rs.30 - Rs.50, depending on the medical condition.

Launched in March 2008, eSwasthya was integrated into Piramal Swasthya services in 2011 and has till date treated more than 94000 patients. This model provides reliable, high quality health care at a villager's doorstep through cutting-edge technology developed from sophisticated diagnostic protocols. This program now operates with an annual budget of \$500,000.



Mobiles for information & dissemination

Hello Sakhi

Organisation

Kutch Mahila Vikas Sangathan (KMVS)

Project Location & Coverage Area

Kutch, Gujarat

Project URL

www.kmvs.org.in

Area of intervention

Empowerment

Empowering rural women of Kutch

Kutch is the largest district in India with about two million people spread across 966 villages with 70 per cent literacy. Kutch is also fast industrializing because of which, local communities say, crime and alcoholism have been rising.

Kutch Mahila Vikas Sangathan (KMVS), a non-profit organisation founded in 1989 with the objective of empowering rural women of Kutch, launched a helpline “Hello Sakhi” in 2010 in partnership with the Mahila Police Cell of Gujarat Police for immediate response to cases of domestic violence.

The help line functions round the clock on all days including holidays. It uses a toll free number attended by trained volunteers. A lady sub-inspector is available at the helpline all the time. Two volunteers sit with two cell phones right in the office of the lady sub-inspector – one to receive calls and the other to make calls when required. In the field, Hello Sakhi has one woman legal counselor in each block supported by several para-legal trained women in slums, villages and panchayats. Operators of the helpline authorized by the District Superintendent of Police authorizing the bearer to intervene in domestic disputes.

The volunteers listen to the caller and record the details in the prescribed form / register and initiate appropriate action keeping in view the nature of the complaint. They coordinate with the lady sub-inspector for guidance and sharing. If necessary, counselors get connected with the victims to figure out their accurate needs and take appropriate actions. In case legal aid is required, they take the help of the e-Kanoon software and post their

Launched as a helpline “Hello Sakhi” in 2010 in partnership with the Mahila Police Cell of Gujarat Police, addresses immediate response to cases of domestic violence

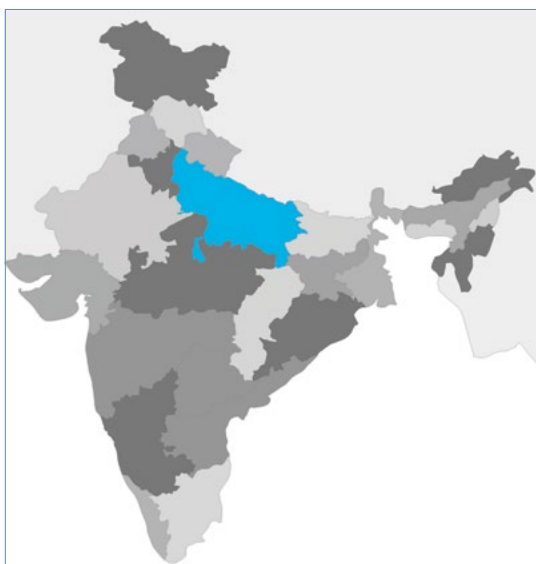


query to reach a panel of subject-specialised lawyers who revert back with legal provisions and steps. In case the victim needs direct legal aid, she is linked with a lawyer.

Reach & Road Ahead

The helpline is now available across both urban and rural areas of all the 10 blocks of Kutch district. Extensive penetration of mobile phones has enabled almost all women in distress to use the helpline. Many women who hesitated earlier in talking about violence issues now use the helpline. The helpline has changed the mindset that ‘husbands have control over their wives and can beat them at their will’. By 2011, the helpline has received 700 calls within the launch of the helpline and majority (60%) of which have been from Bhuj and Mandvi blocks.

So far, the helpline has solved more than 1500 cases and has benefited more than 3400 beneficiaries. The project is very economical as the fixed cost for one-time training is Rs. 35,000 and other recurring cost is Rs.65,000 for one district. There should be partnership with the government departments, especially Department of Women & Child Development.



Mobiles for information & dissemination

MHSM Toolkit

Organisation

Datamation Foundation Charitable Trust

Project Location & Coverage Area

Kanpur Dehat (rural district) Uttar Pradesh

Project URL

www.datamationfoundation.org

Area of intervention

Information Dissemination

SMS toolkit for pregnant women

Due to several factors such as lack of awareness about mother and child care practices, India has one of the world’s worst infant and maternal mortality rates. This has led to the initiative to deliver health information through mobile technology, which is available to most of the Indian communities.

Datamation Foundation Charitable Trust is a Delhi-based non-profit set up in 2002. In 2009, the Trust launched a project Maternal Health Services on Mobile (SMS Toolkit) to disseminate circulate vital information regarding Reproductive and Child Health directly to the pregnant and lactating women or their family members and friends through mobile phones, using localized SMSs in Hindi.

The project was implemented in technical partnership with One World South Asia (OWSA) and Microsoft Research who built a SMS toolkit that allows direct sending and receiving of SMS from an ordinary PC or laptop at a very low cost.

Unlike standard SMS projects which rely on an automated registration process, here it was done manually, preceded by a strong community mobilization and linking with existing health workers ASHAs, ANM and Dais. This process of manual registration allowed the project to involve the community at large, including important stakeholders like husbands and other family members of the pregnant women and gain their acceptance for the project; build links with existing health infrastructure and workers; and promote the project and create a buzz.

Educating pregnant and lactating women or their family members and friends through mobile phones using localized SMSs in Hindi

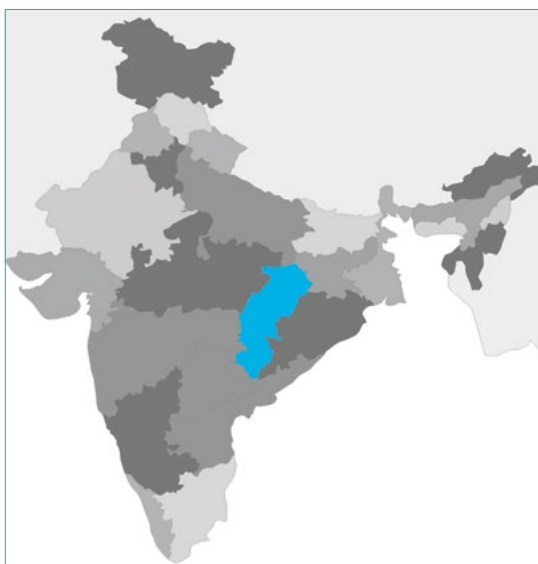


After registration the details were recorded on the Content Management System (CMS) which automatically sent out two SMS alerts to the registered users at a calculated time for 40 weeks during the pregnancy.

Reach & Road Ahead

The project was implemented at four primary health centres and five other neighbouring villages of the Katari cluster in the Ghatampur block in Kanpur Dehat (Rural) District of Uttar Pradesh, India.

Over 1000 pregnant and lactating women with their families and health care workers have been benefitted. A total of 3171 pregnant women were registered for the SMS service during the project period. About 2300 child birth registrations were done and were also registered for post natal SMS services. The project has scope for collaboration with the government. Scaling up can be done with the help of government funding.



Mobiles for information & dissemination

CGNet Swara

Organization

Mojolab Foundation

Project Location & Coverage Area

Chhattisgarh

Project URL

www.cgnetwara.org

Area of intervention

Empowerment

Democratising journalism in Chhattisgarh

Many of the estimated 80 million members of India's tribal communities lack access to any mainstream media outlets. This often poses serious barriers to their socio economic development, as their grievances about government neglect and economic exploitation remain unvoiced.

CGnet Swara was launched by Shubhramshu Choudhary in the year 2008 to empower these marginalized people by giving them voice by means of mobile phones. The "CG" in the name "CGnet Swara" comes from the name of the region where the project was started - Central Gondwana region. The platform is an attempt to democratize journalism in these secluded areas. One missed call ensures that the automated service will reach the caller and the message will be recorded on the server.

To use it, they call a phone number using any mobile (or fixed line) phone. Callers are prompted to press "1" to record a new message, and "2" to listen to messages that have already been recorded. These message-reports range from health, education and public distribution system to problems like corruption, delayed receipt of transfer of payments, etc. The moderators later verify, edit and document the reports and put them up on the webpage along with the audio report. Approved reports are then made available for playback over the phone.

Reach & Road Ahead

Presently CGNet Swara salaries of between INR 5,000 and INR 15,000 to its moderators and technical assistance staff and telephone bill comes in between Rs.30,000-40,000 per month. The project is funded by UN

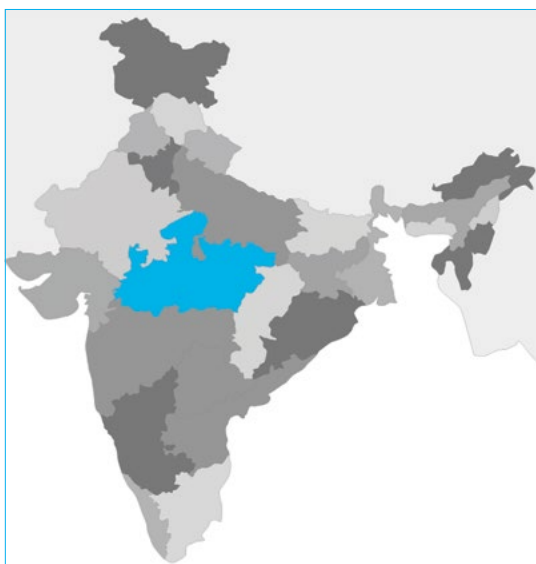
Using mobile phones to report range of issues from health, education and public distribution system to problems like corruption, delayed receipt of transfer of payments, etc.



Democracy Fund and a Knight Fellowship, and is now trying to become self-sufficient by evolving into other streams using the same basic infrastructure.

CGNet Swara empowers marginalized people, including India's 80 million tribals by giving them an outlet to communicate with each other at the national and global level. Because the system gives rural, low-literate communities a way to connect using their own words and voices, CGNet Swara also can play an important role in preserving some of India's ancient tribal languages.

The vision of CGNet Swara is to scale the service within India and eventually beyond, creating a vibrant ecosystem of local reports that is universally accessible via low-cost mobile phones. Since its inception, CGNet Swara has more than 4,500 posts, which include news, stories, songs and grievances, obtained from more than 289,000 callers in the last four years. CGNet Swara is being planned in Somalia, while in Indonesia a text-based service is up and running and proving popular in Kalimantan, on the island of Borneo.



Mobiles for information & dissemination

Citizen COP

Organisation

Infocrafts Web Solutions Pvt. Ltd.

Project Location & Coverage Area

Madhya Pradesh

Project URL

www.citizencop.org

Area of intervention

Empowerment

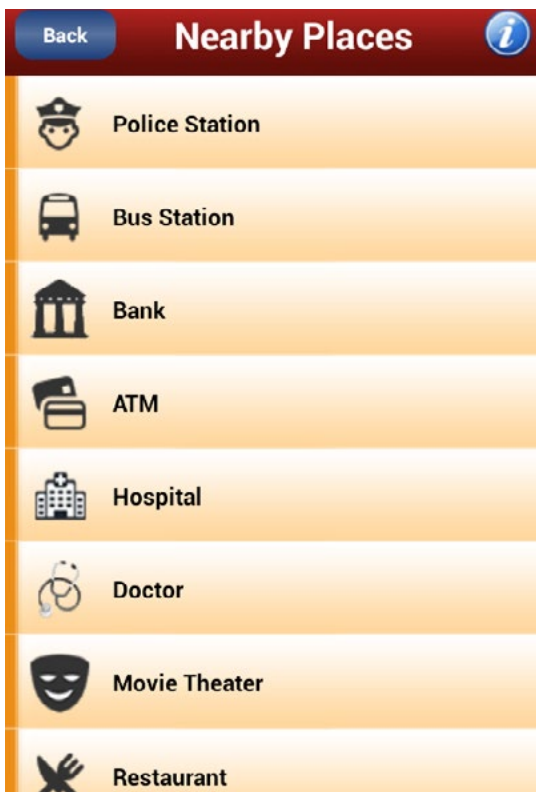
Break barriers between police and society

Citizens of Raipur city who were facing crimes, including kidnap, robbery, eve teasing, theft and lost or stolen articles anonymously by a click of a button on their smartphones on an application “Citizen COP”. Infocrafts Web Solutions Pvt. Ltd has developed an influential tool called Citizen COP that empowers common man. Citizen COP is a potential technology designed and developed to break the barrier between police and society. It comes with a bundle of compelling features to help citizens find instant help whenever they require. Additionally, it facilitates users to voluntarily report a crime without disclosing identity, secure them in safe zone, access quick help, call police and enjoy convenience through instant towed vehicle search and notifications.

The Help SMS feature is specifically designed to reduce women crime in society. Anyone can send an instant help SMS that is along with current GEO location to near ones and police control room whenever anyone is in danger. It helps the user to know the contact details of police authorities at nearby locations. On enabling the GPS settings, user can get the filtered contacts that are relevant to user’s current location. Using a feature like e-LakshmanRekha, user can set an area on map as a Safe Zone in which he feels secured. Whenever the user crosses the boundary mentioned, the SOS message will automatically send to preset contact numbers along with the police officials.

The application has many features including ‘Report Criminal Activity’, get ‘Police Phone Directory’ with ‘Contact Your Law Enforcement Officials’, ‘PUSH Notification’ feature to get live traffic updates and any important

Facilitates voluntarily reporting of a crime without disclosing identity, securing safe zone, accessing quick help, and calling police and enjoying convenience through instant towed vehicle search and notifications

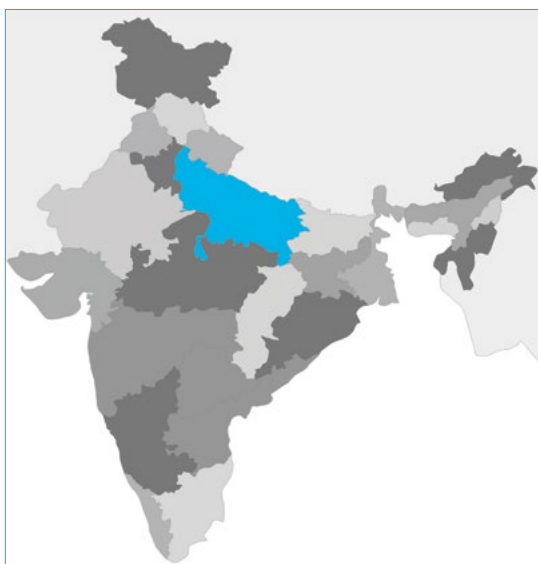


news published by police for general public, 'GEO Fencing' to get an instant access to police station of the specific area along with the contact number of the BEAT in charge. Using "Lost Article Feature", the user can report lost article like passport, PAN card, driving license more instantly. Users do not need to personally go to the police station to lodge a complaint as it can be done via the App. In case of a lost mobile, the user receives an email to confirm receipt of complaint. This letter can be used to issue a new sim card so the user does not have to visit police station.

Reach & Road Ahead

Starting with Indore, Bhopal and Jabalpur as three major cities of Madhya Pradesh, it is expanding further now to other cities of state and prepared to run for other states as well. 'Citizen Cop' comes with an exclusive feature that provide users the facility of live location tracking by just registering at www.gpsnow.in for free.

Joining their hands with traffic police and state police departments, Citizen Cop makes general public aware about the traffic rules and helps them abide by all traffic guidelines. It is now being used in Indore, Bhopal, Jabalpur, Raipur, Bengaluru, Jhansi, Navi Mumbai and some other major cities of India. By a simple click on 'traffic fines' button, a user can get the complete list of traffic fines that are applicable on violation of traffic laws.



Mobiles for information & dissemination

CycleTel (Family Planning via Mobile Phones)

Organisation

Institute for Reproductive Health India

Project Location & Coverage Area

Delhi, Lucknow, Uttar Pradesh

Project URL

www.cycletel.org

Area of intervention

Health

Simplifying family planning options

With nearly 1.2 billion people, India is the world's second-most populous country and has significant need for family planning options. Georgetown University's Institute for Reproductive Health (IRH) developed a mobile phone service called Cycle Tel that facilitates use of a family planning method with Short Messaging Service (SMS). CycleTel was deployed in April 2011 with a select group of women. IRH and ThoughtWorks are closely monitoring how the technology is working.

Based on the Standard Days Method (SDM), it alerts woman of her fertile days in each menstrual cycle via SMS, indicating when unprotected sex should be avoided to prevent unwanted pregnancies and be able to acquire proper family planning options. To enrol, women simply answer three screening questions to find out if they are eligible to use the method. They then enter the start date of their period each month to continue receiving personalized alerts based on their own cycle. CycleTel is currently available in English and Hinglish (Hindi-English). Additional messages support correct use of the method, help her monitor her cycle length and offer information on other reproductive health issues such as the importance of optimal birth spacing. The woman is reminded to re-enrol each cycle by sending in the date of her next period.

Reach & Road Ahead

CycleTel is a straightforward and low-cost method based on avoiding unprotected intercourse on 12 specific days around the middle of a woman's menstrual cycle. Funded by USAID, IRH conducted CycleTel proof-of-concept testing through focus group discussions, cognitive interviews and

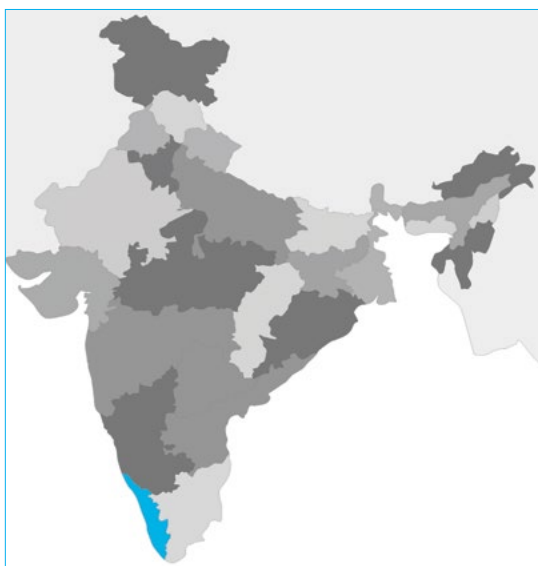
Alerting woman of her fertile days each menstrual cycle via SMS, indicating when unprotected sex should be avoided to prevent unwanted pregnancies



manual testing of the service with approximately 100 men and women in Lucknow, India. In the pilot phase of the programme, CycleTel has provided its services to 800 women.

CycleTel is targeting to reach 16 million young Indian women in two phases – firstly targeting approximately 10 million women and in the second will target the remaining 5.5 million bottom-of-the pyramid segment with a voice-based offering.

IRH is also seeing partnership with Nokia Life (Microsoft), an SMS service that provides health, education and agriculture information to over 50 million Indians. This partnership also enables IRH to feature new informational messages on family planning, fertility awareness, and other critical reproductive health issues, targeted by age, gender and marital status. These messages will enable IRH to reach hundreds and thousands of users with new content, as well as to explore the effect these messages have on knowledge, attitudes and, ultimately, CycleTel uptake. The three-month-long fertility awareness messaging service will be available in 12 languages and will operate across all major mobile network operators in India; users will then have the ability to opt in for the CycleTel service. CycleTel would develop a customer base far beyond what IRH could amass by working with traditional family planning partners.



Mobiles for information & dissemination

Dr. SMS

Organisation

Kerala State IT Mission

Project Location & Coverage Area

Kerala

Project URL

www.itmission.kerala.gov.in

Area of intervention

Health

Delivering health care information in Kerela

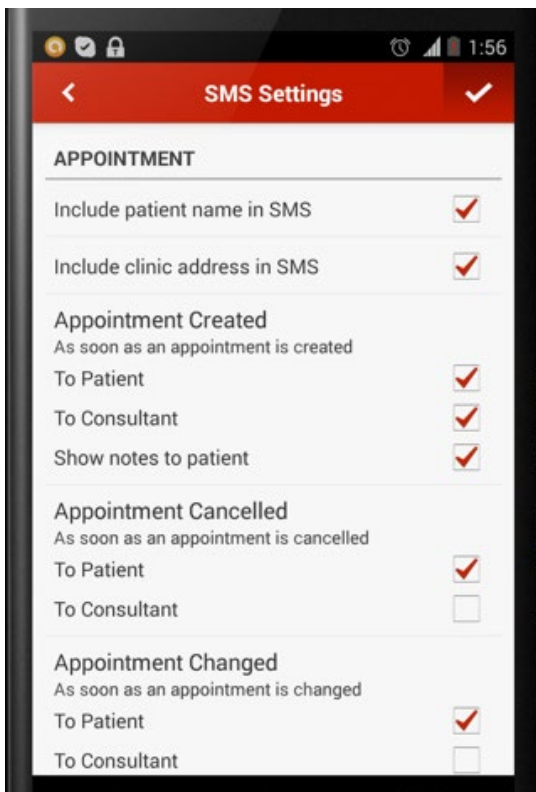
The State of Kerala is recognised world over for its notable achievements in the field of health. With low per capita incomes, Kerala has managed to achieve health indicators that are at par with advanced countries of the country. However, the glowing achievements in Kerala's mortality indicators notwithstanding, all does not seem too well with the health sector here. There have been growing concerns about the rising morbidity levels in the State, led chiefly by the increasing incidence of lifestyle related diseases like diabetes, hypertension, heart diseases and cancer. Kerala also has seen a re-emergence of infectious diseases like Leptospirosis, Malaria coupled with increasing reports on diseases like Chikungunya and Dengue. The State also has the highest road accident rate in India.

Dr. SMS, an initiative of NIC (National Informatics Centre) Kerala, is a unique attempt to deliver healthcare information through mobile phones. The facility has been integrated with the Short Code (537252 – KERALA in Non Query mobile keypad), opened exclusively for m-services of the State.

The platform enables citizens to use their mobile phones to get information on health resources. It provides contact details of nearest health facility/ specialty centre when it is required by patients. An SMS with requested facility/specialty is sent to the specified number that will receive the details of nearest centres meeting the requirement. Users can send their request using pre-designated number (9446460600).

The content of the SMS should include the pin code of the locality where the person concerned is looking for the medical facilities/ doctors. As part

Enabling citizens to use their mobile phones to get information on health resources, providing contact details of nearest health facility/ specialty centre

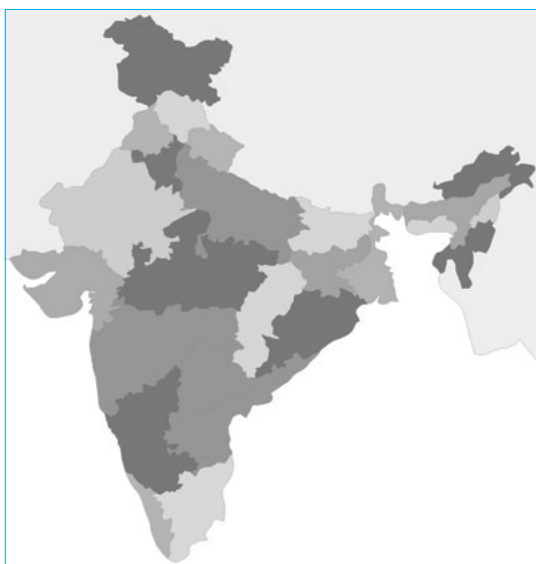


of the State-wide implementation, centralised facility for Dr.SMS has been established at Government owned secure state of the art tier three State Data Center, Trivandrum and a 'Long Code' for the State (9495949000) has been established, and this facility is accessible to subscriber base of all the mobile service providers in the State and even from any operators in India.

Reach & Road Ahead

The project is noted for its cost affordability and effectiveness. To send the message, the customer has to pay a nominal amount of 40 paise or less. The cost of the return SMS is borne by the Government of Kerala. The pilot phase of the project was implemented in Kozhikode, Kerala.

Encouraged by the success of the pilot project, the government announced the launch of the project in all districts of Kerala. The facility is now fully operational with the database of details of about eight out of 14 districts of the state and for the rest of the district data will be appended to the database soon.



Mobiles for information & dissemination

Learning out of the box

Organisation

Vodafone Foundation, Pratham Education Foundation

Project Location & Coverage Area

Pan India

Project URL

www.learn-outofthebox.org

Area of intervention

Education

Delivering high quality but low cost education

Education is critical to people's future prospects, yet many living in rural areas never even enter the education system. "Learn, Out of the Box (LOTB)" is a project aimed at delivering high quality but low cost education in low-income schools in India through the induction of technology as a teaching tool. It is jointly implemented by the Vodafone Foundation and the Pratham Education Foundation. The project aims to improve the standard of education for school children in India by using innovative software and mobile internet to train teachers and help them engage students using interactive learning materials and multi-media content.

Together with Pratham, Vodafone provides all the necessary equipment and learning materials, and train teachers to use the service. Learning with Vodafone provides access to digital educational content aligned with the prescribed curriculum. It includes multiple choice tests that can be completed via SMS text message and a notification service enabling teachers to check understanding of the content and keep parents informed of their child's progress. Teachers can also track attendance, grades and administrative requirements using the accompanying school management system.

The WebBox, provided to teachers, is an internet enabled Android 2.1 OS smart phone, packaged as a keyboard. With an AV cable WebBox plugs into television. The course content of Mathematics and Science, for 6th and 7th standards, in digital format is made available to the teachers through SD card inserted in the WebBox. Thus, WebBox is equipped with learning application for classrooms that contains state curriculum-aligned digital

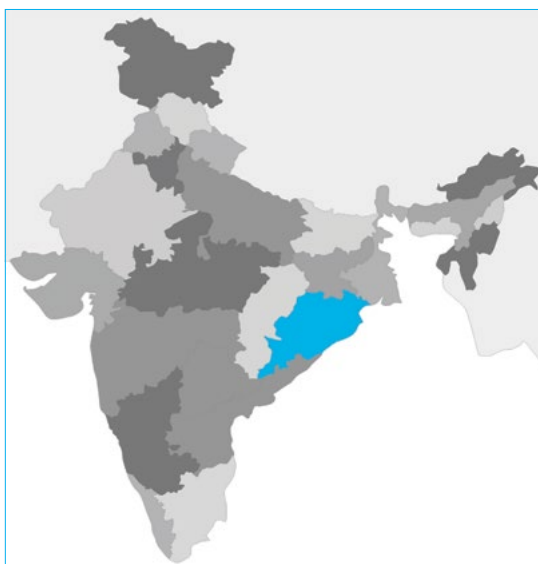
Improving the standard of education for school children in India by using innovative software and mobile internet



content. These include concept videos, in-class activities, projects, group discussions, games, practice questions, and quizzes for assessment that can be used by teachers, both in the classroom and during lesson planning. The internet accessed through a 2G-SIM card in the WebBox is used by teachers to search beyond the course content on the SD card.

Reach & Road Ahead

LOTB was launched in two phases. The first phase started in July 2012 covering 151 schools in Maharashtra, Karnataka, Delhi, Assam and Rajasthan. The remaining 849 locations, spread across several states were launched in the beginning of July 2013. The project brings a low-cost, digital learning solution to 1000 low-income schools across 12 states, reaching over 50,000 children. Learn, Out of the Box helps teachers engage students by making learning fun and enhancing the classroom experience by expanding learning activities and improving learning outcomes, hence, improving student's subject as well as practical knowledge. The project aims to impact economically disadvantaged children by reaching English and Hindi medium government, government-aided, and NGO-run schools in rural, semi-urban and urban localities.



Mobiles for information & dissemination

Hello Doctor24x7

Organisation

Hello Doctor 24x7 Healthcare Pvt. Ltd

Project Location & Coverage Area

Odisha

Project URL

www.hellodoctor24x7.com

Area of intervention

Health

Teleconsulting health care

Most of the time, patients do not know where to go, with whom to meet while visiting government hospitals. Startup, HelloDoctor 24x7 initiated by three friends with background as IIM, IIT and medicine have come together on a common platform to facilitate health care consultations through mobile telephony.

Hello Doctor 24x7 Healthcare Pvt. Ltd is a company launched in 2010 by young doctors and technocrats from Orissa to provide healthcare information to the people using mobile telephony and the Internet. This initiative is supported by the Department of Science and Technology, and KIIT-TBI (Technology Business Incubator) at KIIT University.

The company has set up a state-of-the-art healthcare support centre with highly qualified and trained Medical, Para-medical and Life science professionals to deal with the day-to-day customers' healthcare related service needs. These professionals, who operate through a call centre provide information to callers on hospitals, doctors and other health related services. Residents of the state are able to seek health advice by calling (0674) 6655 555.

Primarily, it helps patients to fix up appointments with top ranking doctors for teleconsultation and if needed actual visits to their chambers or hospitals. The service is highly useful for people staying in remote corners of the state who wish to consult doctors living in the state capital Bhubaneshwar. Hello Doctor has got more than 200 such doctors empanelled. When patients call in, trained professionals at the call centre

Providing healthcare information to the people using mobile telephony and the Internet

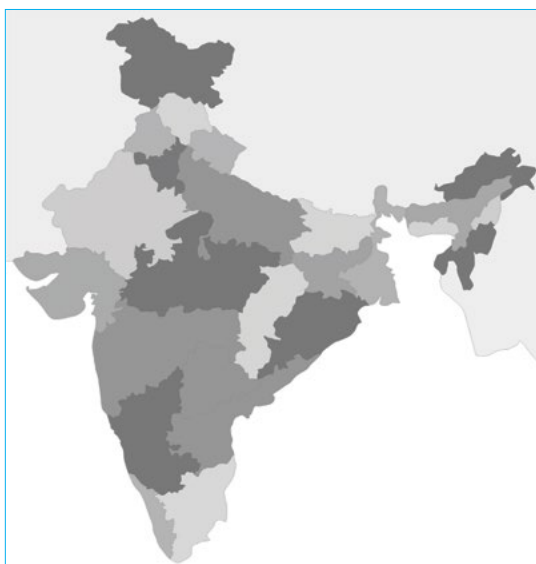


provide guidance as to which doctors to consult and help in fixing up appointments with them for teleconsultation. Patients send in their medical records by e-mail to the doctor concerned and consult them at the appointed time over mobile phones.

Reach & Road Ahead

The service, which was launched on July 20, 2014, has handled 15,000 calls till date. To begin with, a customer must first buy a voucher worth Rs. 300 or 500 and recharge the amount on his/her mobile with the code that is printed on the back of the card. The person can then call up the Hello Doctor 24X7 helpdesk, where trained executives redirect the call to the right doctor upon inquiring about the ailment. However, a patient also has the option to choose his or her doctor.

The system works as the doctor who takes the call also gets paid for attending it. For a minute of conversation, a general practitioner gets Rs 20, a specialist gets Rs 40 and super specialist gets Rs 60. As they get paid, doctors do not hesitate to talk to the patient or his/her kin.



Mobiles for information & dissemination

Mera Doctor

Organisation

Mera Doctor

Project Location & Coverage Area

PAN India

Project URL

www.meradoctor.com

Area of intervention

Health

Primary health care facilities over the phone

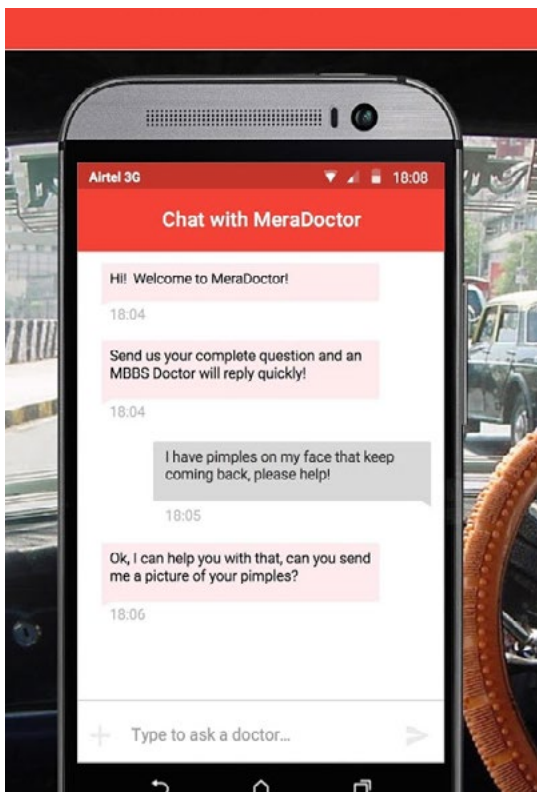
In 2011, Ajay Nair, a Harvard graduate with a master’s degree in Public Health, co-founded Mera Doctor with Gautam Ivatury of Signal Point Partners, as a call-centre facility that allows doctors to provide primary health care facilities to Indians over the phone for a nominal subscription fee.

For people living in Mumbai, a subscription can be bought for Rs 300 from a local pharmacy. This will cover up to six members of the subscriber’s family for a period of three months. People living outside Mumbai can sign up on the Internet at www.mera-doctor.com.

Mera Doctor’s doctors use standard phone triage methodologies: taking down symptoms, understanding medical history, breaking down the causes of any given symptoms and then telling the patient what to do next.

MeraDoctor gives people across India access to immediate health advice via an Android app and a platform of doctors carefully screened and trained to give advice via instant message conversation. The company recruits doctors and then puts them through a rigorous training process that includes learning how to record patients’ medical histories with a sophisticated Electronic Medical Record (EMR) system that follows standard international codes for medical conditions (ICD-10); more importantly, however, the doctors have to have high levels of patience, kindness and compassion and be able to exhibit those qualities over the phone.

Doctors providing primary health care facilities to Indians over the phone for a nominal subscription fee

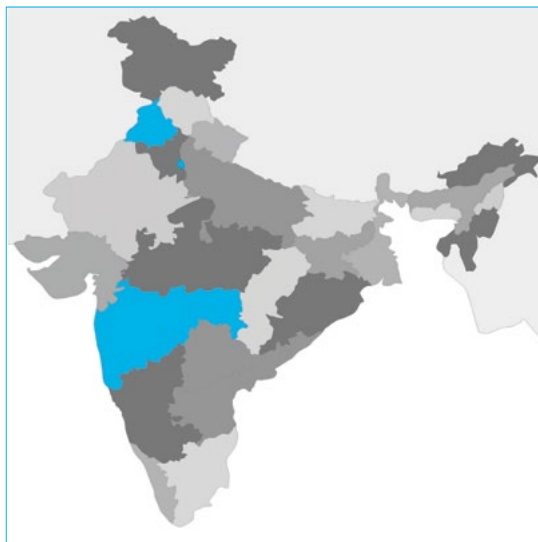


MeraDoctor maintains patient medical records so that a patient's history is known the next time they call, and advice can be tailored to the situation. Since many of MeraDoctor's users are young people using shared phones or facing pressure / scrutiny from family members, the latest app version offers a message / chat delete feature to prevent private medical information from being read by others. MeraDoctor's internal health records system protects privacy and prevents unauthorised access.

Reach & Road Ahead

After four years of running the paid service, the promoters found that growth in subscriptions was not fast enough. So, from February 2015, Mera Doctor has introduced a free service where people can download a free mobile phone application from Google Play store and send in their health related questions. Doctors of Mera Doctor send in their replies as soon as they can. This has enabled the company to go pan India and now in just a few months the company has answered more than 50,000 queries.

Their model is based on China's Chunyu Yisheng which relies on making the service free for both doctors and users, with its revenues raised through advertising from insurance companies, pharmaceutical companies and private hospitals. The new model has already received some funding from investors but is yet to become a profitable entity on its own.



Mobiles for information & dissemination

Sound of Silence (Empowering the Hearing Impaired with the Help of Mobile Phones)

Organisation

Sounds of Silence Foundation

Project Location & Coverage Area

Maharashtra (Mumbai, Pune), Delhi, Punjab

Project URL

www.soundsofsilence.in

Area of intervention

Empowerment

ICT tools to educate the deaf and the mute

Sumit Singh Gandhi initiated non-profit Sounds of Silence (SOS) to change the lives of speech and hearing impaired children through the use of a cell-phone. In 2008, SOS started as pilot with 10 kids from Pingalwara NGO in Punjab and taught them to communicate via SMS. SOS uses mobile phones to teach the kids and help them express themselves. Trainers mainly use 3G SKYPE and SMS technology to train on the curriculum. With the help of our Curriculum designed on the guidelines of Oxford Syllabus and SMS we provide an overall development. Team of Psychologists have assisted the organization team with a fixed messaging pattern which will lead to all round mental development of the children and help them overcome insecurity and lack of self confidence.

SOS has implemented two programmes that use ICT tools to educate the deaf and the mute. The first program teaches school children how to use SMS to communicate with one another. SOS also provides a mobile phone that contains learning modules for students.

The second programme provides two months training with laptops to prepare young adolescents who have completed their education to acquire sustainable jobs. SOS also plans to setup the first hearing-impaired chat, using the Business Process Outsourcing (BPO) model. Through these programs, these children learn how to use ICT technology to communicate with each other, which increases their IQ level, develops their personality and empowers them. Schools like Vikas Vidyalaya, Stephens School, Koshish School for Deaf, and Zaveriwala Deaf School in Mumbai and Icare and Cozy Cot in New Delhi have inculcated SOS learning sessions in the curriculum.

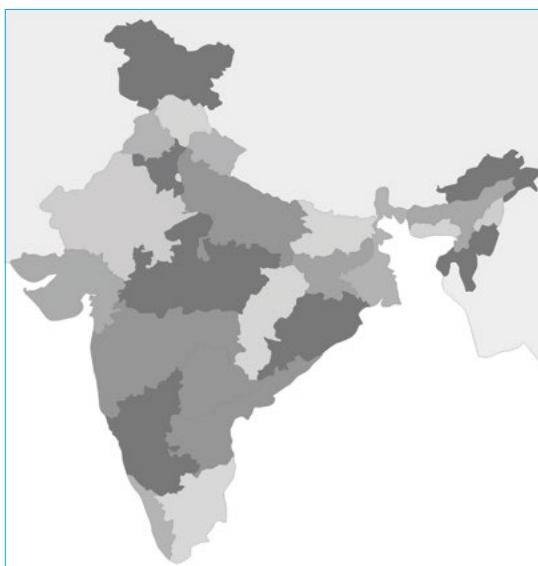
Changing the lives of speech and hearing impaired children through the use of a cell-phone



Reach & Road Ahead

Currently, SOS has 100 volunteers, with only two of whom, other than Gandhi, being full-time. They now have a presence in four cities – Delhi, Mumbai, Pune, and Punjab. Presently, they send 100 SMS per day in fluent English. According to SOS, so far they have been able to reach more than 5000 children across the three cities.

As a result of their training, the IQs of the children have gone up from 65 to 95. They have also been able to train a few adolescents and get them jobs in different companies. Two girls from that orphanage are National level classical dancers as they got the opportunity to interact with the choreographers and explore their talents. The sos is primarily self-funded but recently a few corporate sponsors have come forward with funding support.



Mobiles for information & dissemination

mDhil

Organisation
mDhil

Project Location & Coverage Area
Karnataka and Pan India

Project URL
www.mdhil.com

Area of intervention
Health

Health awareness through mobile phones

Having lived in the United States all his life, Nandu Madhava moved to India in 2008 and started mDhil in 2009. Usually, health is seen as a problem only at the bottom of the pyramid. However Nandu, sees health as a universal issue prevalent in all sections of Indian society.

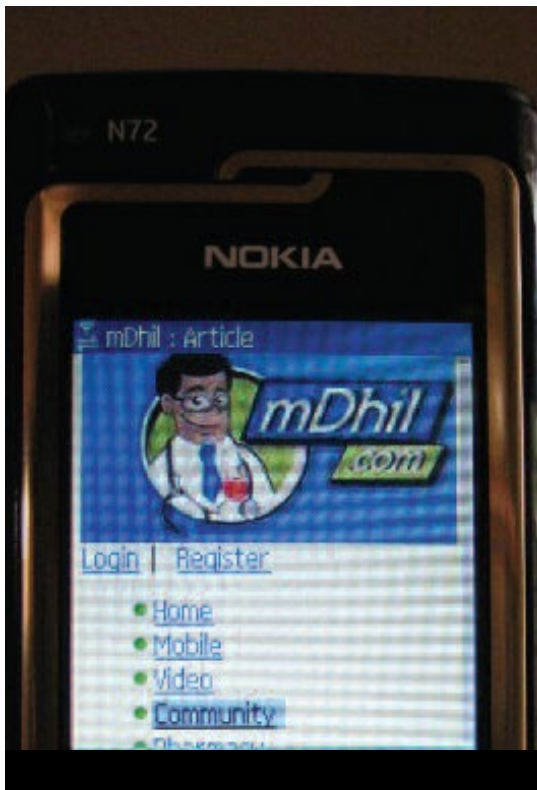
mDhil Health Info Services Private Limited, a Bangalore-based for-profit started in 2009 their mDhil service that provides health, wellness, and lifestyle information for the Indian user via mobile devices and online videos.

mDhil initially began as an SMS based service that was available through mobile service providers targeting people between 17 to 25 years of age in tier I & tier II cities as this group is the early adopter of mobile and web technology. mDhil designs the content that is sent out to subscribers by consulting with doctors, NGOs, clinics, specific groups and students.

The service provides not only basic health information, such as on tuberculosis, diet, stress, diabetes etc., but also offers information for culturally taboo topics for women in rural areas such as puberty, reproductive health, birth control, and menstruation. Sexual health is also a huge topic in this age group and so is women's health. Content is offered via text messages, mobile web browsers and interactive digital content in form of videos.

Text-message subscribers receive three health messages a day on their mobile phone for a fee of just one rupee (about 2 cents) per day. The health

Providing basic health information, such as on tuberculosis, diet, stress, diabetes etc., and offers information for culturally taboo topics for women in rural areas such as puberty, reproductive health, birth control, and menstruation

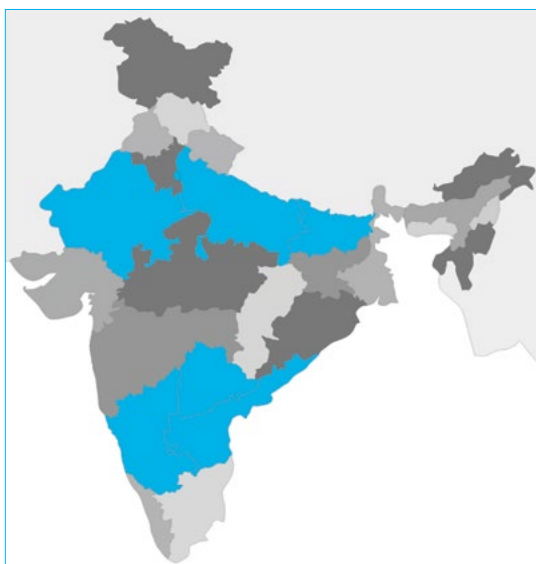


alerts are written by public health professionals such as registered nurses and physicians, and the most popular topics are sexual health, weight management and H1N1 information. However, SMS services are usually faced with the challenge of overcoming the language barrier. To overcome this, mDhil also provides health information both in English and Hindi on six YouTube channels, which focuses on wellness, women's health, and medical expertise.

Reach & Road Ahead

At present the company's videos reach over 2.5 million people every month, helping individuals to live healthier lives. Although the company still does a lot of SMS based information, in the last two years they have transitioned to create applications for mobiles and desktops apart from video content. While 60 per cent of their traffic comes through mobiles, 40 per cent comes from computers as well. Although 85 per cent of their traffic comes from India, about 10 per cent comprises audiences from Pakistan, Saudi Arabia, Philippines and Indonesia.

According to the company's website, as of May 2015, mDhil crossed over 40 million lifetime views and now reaches over 100,000 video viewers a day – that's 70 viewers every one minute. MDhil operates on a subscriber model: for one rupee, or five cents, a user gets three health-related messages via mobile text. mDhil's partners include leading online companies, mobile carriers, and consumer goods companies that seek deeper engagement with digital audiences using a data driven approach.



Mobiles for information & dissemination

Sevamob

Organisation
Sevamob

Project Location & Coverage Area
UP, NCR, Karnataka, Rajasthan, Bihar, AP and Telengana

Project URL
www.sevamob.com/gaon

Area of intervention
Health

Providing primary healthcare services through mobiles

In January 2012, Sevamob Ventures, a US based for-profit launched Sevamob healthcare services in India. Using a combination of mobile vans and telephony, Sevamob is providing primary healthcare services in tier two, three and four cities in the states of UP, NCR, Karnataka, Rajasthan, Bihar, AP and Telengana. Their target audience includes students, employees or groups whose monthly family income is between Rs 5,000 to Rs 25,000. In some areas that SevaMob serves, there are no registered doctors in a 10 km radius.

The company's full-time mobile teams consist of qualified doctors and sales representatives that carry Android tablets with mobile software, which can operate without network in remote areas. Field officers use an Android application that works offline and syncs with the server when the network is available. At signup, it is used to capture patient demographics and electronic medical record. For prescription requests, trouble tickets are created on it with pictures from camera and text and description. Other features include contacts and payment management. The complete workflow works without network. These officers provide basic primary care, medicines and prescriptions are delivered on-premise by mobile clinics with the help of mobile technology. For advanced care, the teams are supported by back-office specialists, a 24x7 call centre and a network of third party service providers like Hospitals, Clinics and Pathologists.

At signup, the team captures patient demographics and electronic medical record in the software, gives a subscriber card, and performs initial check-up. Once a month, the company provides basic primary care at door step

Using a combination of mobile vans and telephony, Sevamob is providing primary healthcare services in tier two, three and four cities in the states of UP, NCR, Karnataka, Rajasthan, Bihar, AP and Telengana

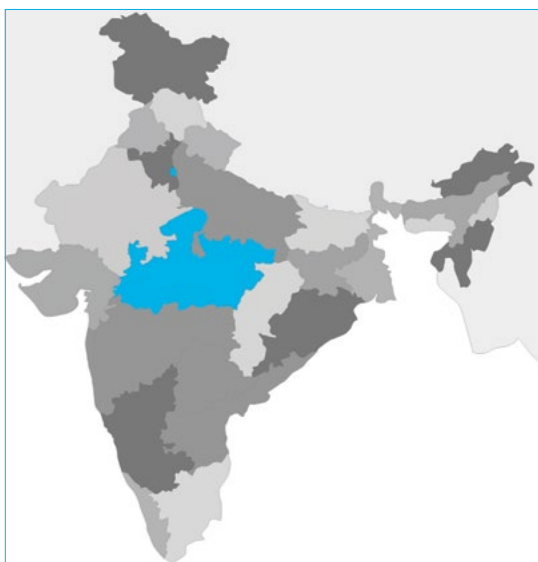


for the subscribers (school, workplace etc). This includes dental, vision screening, blood pressure, blood sugar, height-weight management, temperature, pulse, ECG, nutrition planning etc. The mobile clinics also dispense medicines for common ailments like calcium and iron deficiency, toothache, fever, stomach worms, vomiting and stomach ache.

Reach & Road Ahead

The mobile clinic model requires annual fee and monthly fee for its service; however due to its cloud-based technology, the system can be easily replicated. The company provides its service for an annual subscription, ranging from Rs. 300 to Rs. 1500 and walk in fees is around 100 to 150 rupees. The system is flexible and scalable as it hosts its technology on Amazon data centre so it can handle data from multiple districts, states and countries. Using a SaaS (Software as a Service) model, the license fee for the technology ranges from US\$250/month to more than US\$1250/month.

For prescriptions, Sevamob creates tickets with picture and description, which go to back-office MBBS specialists, who are paid on a per-ticket model. The specialists either give a prescription or setup an appointment if the prescription cannot be provided. Subscribers can call a 24x7 call centre for service requests. In case of emergency, subscribers are sent to in-network hospitals where if they have Sevamob's in-patient health insurance, they get up to Rs 50K / year of in-patient treatment at no extra charge. As of now, Sevamob has more than 6,000 subscribers.



Mobiles for information & dissemination

Mobile Phone Integration for 24x7 livelihood Training

Organisation

NIIT Foundation

Project Location & Coverage Area

Delhi, NCR and Madhya Pradesh

Project URL

www.niitfoundation.org

Area of intervention

Education

Mobile-learning solution for enhancing employability skills

NIIT Foundation, the not-for-profit arm of education major NIIT launched in 2010-11 a mobile learning solution which aimed to enhance the employability of the youth in rural areas and slums. The idea behind the origin of this project was based on the premise that English is necessary to upgrade the skill set and augment the employability of the marginalized youth, who have no platform to learn and practice English.

The project also aimed at providing employability skills to the youth in the age group of 17-25 years and placing them in the organized sector. For inculcating the habit of 24x7 learning using mobile handsets, the youth were provided with English language content applications as courseware. This enabled them to practice English and learn on their own with the help of self-quizzing mechanisms. Other useful features were audio-visual tutorials, pronunciation help, and Hindi-English dictionary to enhance vocabulary as well.

The project provided a never-before medium to learn and practice English language, for the youth dwelling in slums and rural areas. The marginalized youth aspire to learn English and they join classes for the same. The problem, however, is that language skills cannot be mastered without adequate practice, which they cannot do at their homes for the family members don't know the language well. So, this medium provided them a hands-on way to learn, practice and master English.

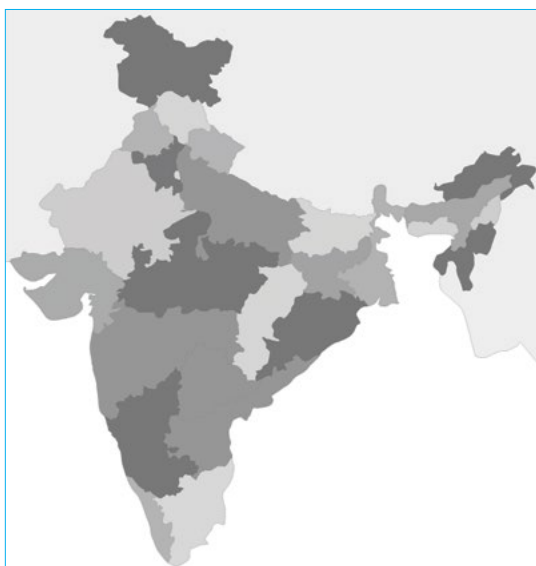
A mobile learning solution aimed to enhance the employability of the youth in rural areas and slums



Reach & Road Ahead

It also provided them livelihood enhancement options, as the programme aimed to place the youth in organized sector. This course including mobile phone learning tool costs INR 6,000 per student. NIIT interviews students periodically to test their learning and students are encouraged to participate in classroom to practice and learn English through participative approach in the classroom. Till date, more than 200 students are being served in Delhi -NCR and it is active in Uttar Pradesh, Madhya Pradesh, Jaipur, Orissa and Maharashtra currently.

From the point of view of improvisation, the programme can be made comprehensive by including ways to enhance other skills for employability assistance, as its focus was only on English language skills. In addition, self-sustaining elements need to be included to revive the project.



Mobiles for information & dissemination

Green SIM CARD

Organisation

IFFCO Kisan Sanchar Limited (IKSL)

Project Location & Coverage Area

India

Project URL

www.iksl.in

Area of intervention

Agriculture

Empowering farmers through mobile telephony in India

IFFCO Kisan Sanchar Limited (IKSL) is the vision of IFFCO, to transform the ubiquitous mobile phone of a farmer into a powerhouse of knowledge. The idea is to make use of IFFCO's deep extensive reach and establish a low cost telecom distribution channel through the network of cooperative societies. To accomplish the task, IFFCO has tied up with Airtel to build and offer a platform for the farmers through the cooperative society network.

To provide location specific input, the country is divided into 60 zones. The subscribers of Green SIM Card of IKSL have the privilege of access to a dedicated Helpline service, which has the potential to become a rural lifeline through a six digit number 534351. Farmers can get a solution to their problems, queries by using this short code.

The value added agricultural services forms the core of IKSL's activities on mobile phone. Five free voice messages per day of importance to farmers are sent on mobile which cover areas of their immediate interest and concern. Experts are accessible on this helpline, who provide solutions to farmers. Where required, subject matter specialists are taken on conference call to provide a satisfactory resolution to queries. Call Back Facility For those subscribers, who could not pick up the voice message call or have missed a voice message for any reason, facility is available to call a short code which provides opportunity for listening to the messages delivered on that day once again.

Offering rural lifeline to the farmers through the cooperative society network

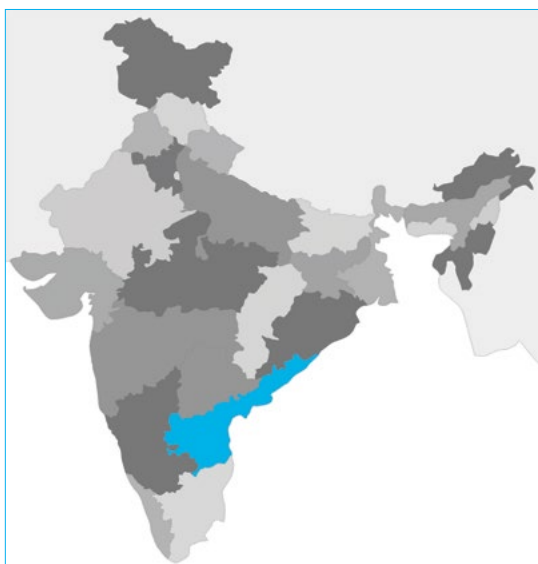


Reach & Road Ahead

The project helps the farmers to improve their income, reduce cost, improve yield, enhance quality, reduce wastage and educate them on livelihood, health, environment and other aspects. The messages are in local languages and it overcomes literacy barrier.

Presently, 40 content managers of IKSL are managing the backend infrastructure under IIMS. Further, 60 outside experts access the System On-line for Quality Assurance Processes, Content Audits and development of Digital Library for Content Team. Various levels of Management of IKSL, have access to MIS and Analytics.

In these initiatives, often, IKSL partners with NGOs, SHGs, Cooperatives, Institutions who have interest in rural India. At present, there are about 10,00,000 farmers who are using IKSL services. In addition, 39 focused communities are actively availing focused services of interest to their Group.



Mobiles for information & dissemination

MOTHER (Mobile based maternal Health Awareness)

Organisation

Centre for Development of Advanced Computing (CDAC), Hyderabad

Project Location & Coverage Area

Andhra Pradesh & Telangana

Project URL

www.cdac.in,196.12.45.166/mother

Area of intervention

Health

Personalised advice for mothers

About 30 million women experience pregnancy and 27 million have a live birth in India. According to the State of the World's Mothers 2013 Report, an estimated 56,000 mothers die every year and 309,000 newborns die within the first 24 hours of birth. Understanding ICT can be an effective communication medium to reach out to the targeted pregnant women or mothers, CDAC Hyderabad developed the 'MOTHER' tool with support from Department of Electronics and IT, Ministry of Information and Communication Technologies, Government of India in August 2011.

MOTHER is a mobile based application that provides automated voice calls in regional languages to the pregnant and lactating women in rural communities to raise awareness about pregnancy-related health issues, or to give personalized advice based on their critical health parameters. Frontline workers collected women data manually in the prescribed registration forms and in the evening, records are being updated online from the Mandal (block) Headquarters.

Once the data is registered, voice alerts are being pushed from the system to stakeholders (Pregnant and Lactating Women, husbands) mobile phones. MOTHER is unilateral Communication (Push Method), therefore, stakeholders cannot call back or interact with the system. To resolve this issue, phone numbers of health officials have been given to stakeholders during the time of registration. Registered women receives customized, pre-recorded health related advices such as what type of care to be taken in case of high risks during pregnancy, immunization remainders, child care, nutrition, etc. in local language - Telugu, in their mobiles.

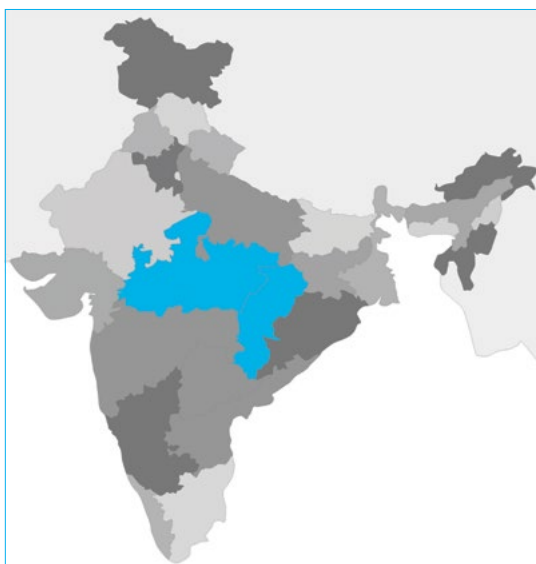
A mobile based application that provides automated voice calls in regional languages to the pregnant and lactating women in rural communities, and raising awareness about pregnancy-related health issues



Reach & Road Ahead

Since the launch of project in pilot area - Srikakulam District of Andhra Pradesh, 30,377 voice calls to 3139 stakeholders have been sent. After seeing the initial success of the MOTHER project, the government of Andhra Pradesh's Health & Family Welfare Department scaled up the project to all districts of Andhra Pradesh. The tool was integrated with Mother and Child Tracking System (MCTS) of National Rural Health Mission (NRHM) at Andhra Pradesh state level, thereby catering to the requirements of 17 Lakh beneficiaries of Andhra Pradesh state.

After seeing the success in Andhra Pradesh, the state government of Jharkhand has shown interest to use the 'MOTHER system' for their 'Drinking Water and Sanitation Programme' to sensitize the rural and urban community in all 24 districts of the state.



Mobiles for information & dissemination

Raxa

Organisation

Raxa EMR

Project Location & Coverage Area

Chhattisgarh, Madhya Pradesh

Project URL

www.raxa.org

Area of intervention

Health

Improving the quality of care

Raxa.Org is a mobile and web-based health information technology company that creates and distributes health related information on mobile phones. Raxa aims to improve the quality of care by providing up-to-date relevant information as well as decision support and analytics to clinicians performing diagnosis and treatment.

Raxa has created free healthcare information system and an open-source electronic medical record (EMR) for people who are unable to afford high-end medical services. It is built using a modified data model of the robust and field-tested OpenMRS platform. It not only involves building the EMR, but also making this system modular, extensible, and freely and widely available for other organizations to easily implement.

This project is an initiative to enhance care delivery, administration, quality improvement, research and patient access at JSS by digitizing information as it currently flows in its rural hospital and community outreach programme. It is being created using free, open source tools and is available for anyone's usage in India and beyond.

Raxa provides decision support mechanism to health workers and improve patients' access to their own personal health information. Using Raxa platform, users can able to access healthcare information using various channels including online SMS and call centre.

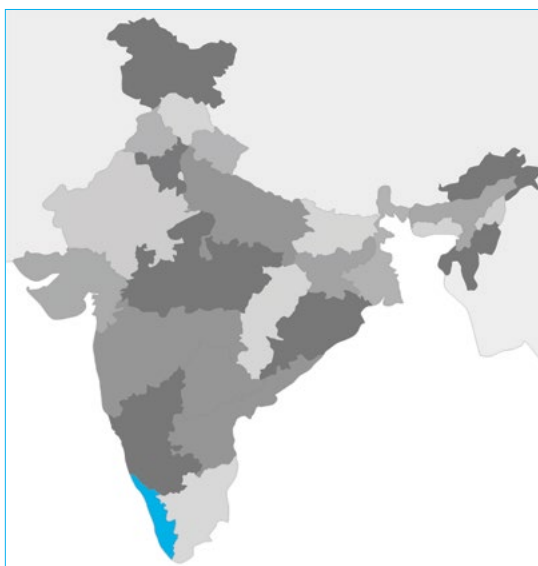
Mobile and web-based health information technology company that creates and distributes health related information on mobile phones



Reach & Road Ahead

Initially, Raxa targeted to support operations at The people's Health Support Group, or Jan Swasthya Sahyog (JSS), a non-profit group of healthcare professionals operating a small hospital and village health centres located in rural Chhattisgarh in India.

Presently, Raxa has received expression of interest from more than a dozen health care organizations with operations in Cambodia, Kenya, Nepal, Israel, Armenia and other countries. Raxa has partnered with Google and Airtel. It has been estimated that there are more than 5,000 installations of Raxa healthcare app served 15,000 patients in the region.



Mobiles for information & dissemination

Rural Health Management Information System

Organisation

Media Lab Asia, C-DAC

Project Location & Coverage Area

Malappuram Dist, Kerala

Project URL

www.rhmis.kerala.gov.in

Area of intervention

Health

Empowering frontline health workers

Media Lab Asia (MLA), not-for-profit organization of Department of Electronics & IT, MC&IT, Govt. of India, developed the Rural Health Information Management System (RHMIS) to empower frontline workers (FLW) with hand held devices for data collection, follow-up, alerts & reminders using mobiles/tablets. The idea behind launching the project is to provide support mechanism to frontline workers for collecting data from the field and also to enhance the accuracy of data, minimize redundant entry and provide reliable storage for health data from the field through the health care reporting structure.

To develop this system, a centralized server was used to store the collected data in central database and its analysis using statistical methods. FLWs can collect the data on the basis of various modules available in the system. These modules include House Details Module – reproductive health, eligible couple, family welfare, antenatal Care, etc.

Health workers are given smart phones or PDAs with “health@palm” loaded in it. The application is capable for handling all the field activities of the root level health workers and it can also replace the field diary. The health worker conducts surveys and enters data on household, demographics and health related data such as reproductive health, maternity health, immunization etc. into their handheld devices using “health@palm”.

Once in a month, they return to their main Primary Health Centre (PHC) and sync up the smart phone / PDA with the computer in PHC. The server side web based application can transfer data collected in handheld device

Provide support mechanism to frontline workers for collecting data from the field, enhancing the accuracy of data, minimising redundant entry and providing reliable storage for health data from the field through the health care reporting structure

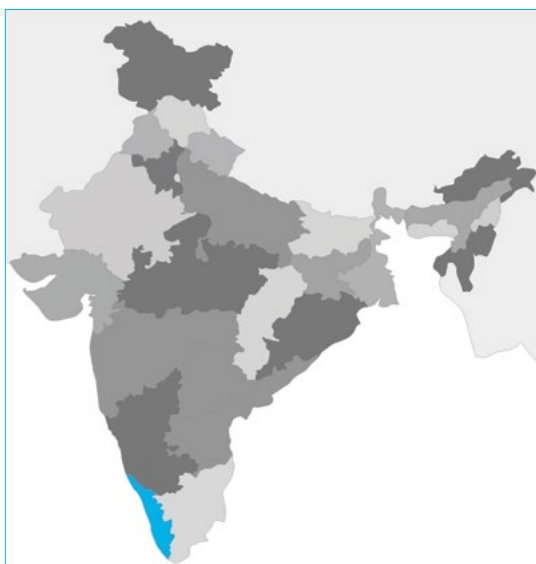


to the Central Server hosted at Data Centre, Thiruvananthapuram. This web based application will generate reports like monthly data set for sub centre and registers such as Family Health Survey, Mother and Child health, immunisation reports etc. Apart from the usual reports that are already in use at the health centres, the system can generate reports on Immunization alerts which will help the health workers in scheduling the immunization activities for the coming month or day. Graphical and custom (dynamic) reports are other very helpful features added in the system. The pilot implementation of the system is undertaken in Tirur Taluk, Malappuram District, Kerala.

Reach & Road Ahead

The pilot project was deployed at 20 PHCs/CHCs of Tirur Taluk, Mallapuram, Kerala has covered about 120 health workers and has touched a population of about 7.22 lakhs. RHMIS can be integrated with telemedicine system for consultation and treatment.

The system can be used for other purposes like different national programmes like malaria control programme, tb control programme, communicable and non-communicable disease control programme, immunization, antenatal and post natal care programme, family planning programme and population survey, researches, census, surveys etc. Development of software for integrated HMIS based on open source solution. The management should provide necessary hardware at the Sub centers, PHCs, CHCs and BPHCs and link them to the Central Health Information Server.



Mobiles for information & dissemination

iSafe

Organisation

UST Global

Project Location & Coverage Area

Thiruvananthapuram

Project URL

www.ust-global.com/en/index.php/2012/260-isafe-application-android-ios

Area of intervention

Women Protection

Safety mobile app for panic situation

iSafe is a mobile app conceived and developed by UST Global for Thiruvananthapuram Police. It appears as a safety feature in Thiruvananthapuram City Police (TCP) mobile app, which help the residents to seek emergency police help in panic situations. With a long press (7 seconds) of the volume key or pressing the panic button of the app, an alert is sent to the Police Control Room along with the location, subscriber id and IMEI number of the mobile. In a panic situation, the application can be opened with the press of a button.

In the background, the application retrieves the user's current location and sends a message to predefined recipients. Once the user moves from one location to another, the application automatically sends updated messages with the new location to the recipients, allowing them to track the changing locations of the user. The position is visible to the police at the control room and also on tablets that the police force carries. This immediately alerts and calls for an action by Police department to send this information to the nearest Police vehicle for rescue.

Apart from the iSafe panic button, the app has information on traffic violations and fines; facility to report an offence, along with a photograph, by sending an e-mail to the City Police Commissioner; information on speed limits in the city; facility to track the nearest police station; emergency numbers; and a variety of safety tips.

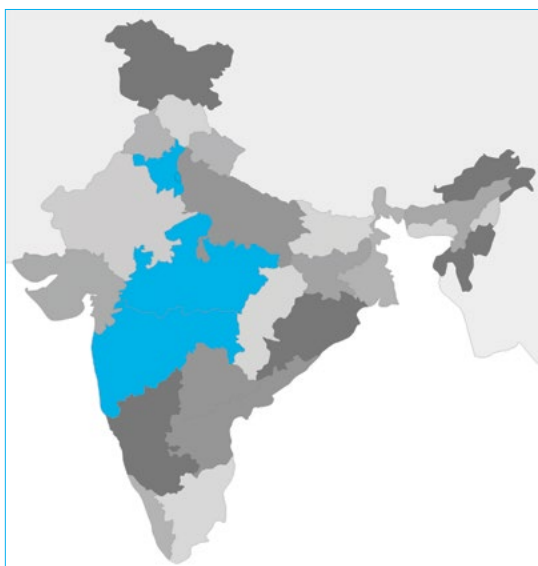
A mobile app helping to seek emergency police help in panic situations



Reach & Road Ahead

'iSafe' is being used by thousands of users in Thiruvananthapuram, including women and senior citizens. To start with, the app – iSafe – has been rolled out for Thiruvananthapuram City Police and would soon be made available in other cities. The iSafe Application is available in the Google play store and in the Thiruvananthapuram City Police website. A one-minute promotional video of the app, which is now integrated with the messaging service Whatsapp, and has actor Manju Warriar for promoting the app is operational.

One may search for the Thiruvananthapuram City Police App in the Google Play Store to get it downloaded and installed in the smart phone. The iSafe feature/the Panic button is incorporated in the Thiruvananthapuram City Police/TCP App. Currently the application is available only on android.



Mobiles for information & dissemination

Balshiksha

Organisation

Media Lab Asia

Project Location & Coverage Area

Delhi, Maharashtra, Haryana and Madhya Pradesh

Project URL

www.balshiksha.in

Area of intervention

Education

Learning aid for pre-primary students

There has always been a need to transform educational scenario, more so in the context of incorporating ICT as an integral part of the educational delivery systems. It is believed that ICT has the potential to transform education.

Balshiksha is collaborative effort of CDAC, Applied Artificial Intelligence (AAI) Group of C-DAC and Media Lab Asia (MLAsia). It is a multimedia mobile-based resource kit that teaches pre-primary students and children of age 1.6 to six years English and Hindi. Balshiksha covers 200 modules that includes alphabet tracing, story-telling, learning through games, rhymes, animations and music. The kit has phonic sounds and pattern work on screen giving instructions for navigation. The kit has comprehensive resource kit for Teachers/Parents.

The kit is divided in to four levels namely play-group, pre-nursery, lower-KG, and upper-KG. It can be operated on a CD-ROM, internet on computers or on mobile phones.

The kit includes 200 modules comprising of alphabet and number tracing; shapes, colour and natural objects identification; general knowledge like body parts and sensory organs; all of which are based on a particular concept and are dramatized in an audio-visual format with animations and graphics in a storytelling manner.

The kit also has “test and evaluation” modules for evaluation purpose, which makes it even more involving and engaging. The teacher’s kit

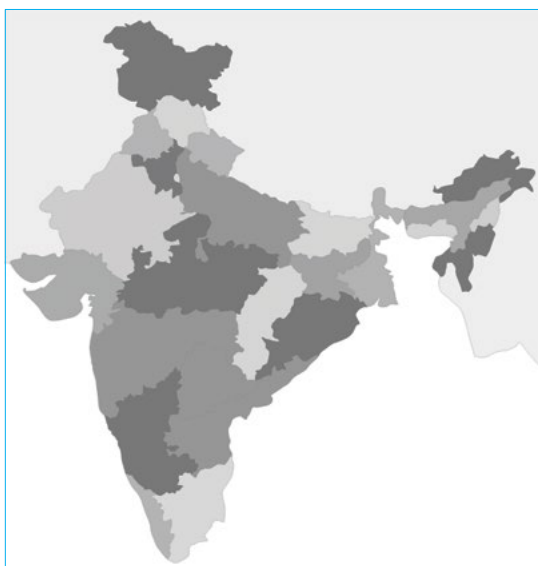
Mobile-based resource kit that teaches pre-primary students and children of age 1.6 to 6 years English and Hindi



includes the guidance as per the needs of teachers for instructing and guiding the students. The content has been designed after adequate research and formulated to suit the Indian context.

Reach & Road Ahead

Balshiksha also provide teaching resources to teachers that allow them to adopt step-by-step guidance for their students of all diversity, including special needs. The content has been adapted to suit Indian context. The project has been implemented in 15 schools in Delhi, Maharashtra, Haryana and Madhya Pradesh, enabling children play to learn these two languages. The kit also encourages feedback from teachers. MLA is also in discussion with MWCD (Ministry of Women and Child Development) in progress to deploy the application in Anganwadis in outer Delhi area.



Mobiles for information & dissemination

Buddy4study

Organisation

Buddy4study

Project Location & Coverage Area

Pan India

Project URL

www.buddy4study.com

Area of intervention

Education

A scholarship web portal

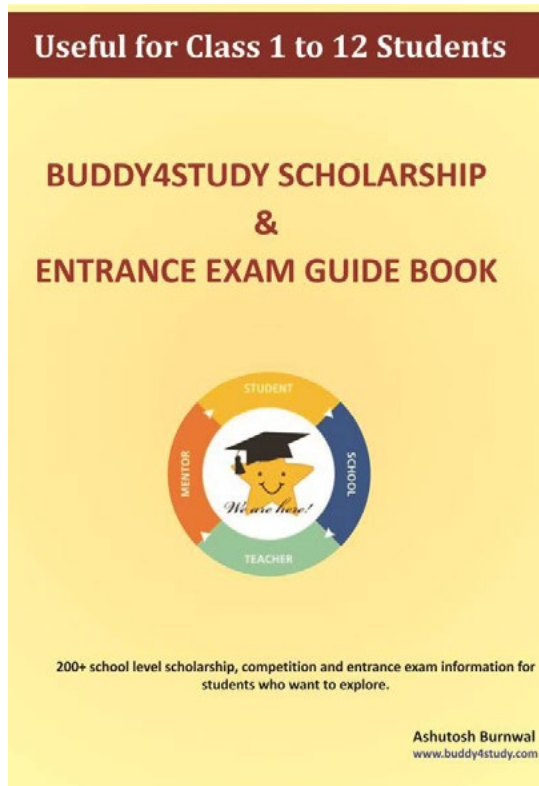
According to a 2009-10 report by the Ministry of Human Resources Development, total dropout rate was 28.86 per cent and 42.39 per cent for primary and elementary categories, respectively. Poverty, family, economic and financial circumstances are considered to be major determinants of school dropouts.

StuddyforBuddy, conceptualized by Ashutosh comes from a lower middle-class family of six, with four brothers. In his house, only one of their education in a reputed private school could be afforded. So his elder brothers decided to give up their share of schooling from a private school for Ashutosh, who was considered the meritorious one. Ashutosh decided to do something for those talented kids who sit back due to financial crunches and started Buddy4study, a scholarship web portal to inform people about inexpensive or free educational opportunities.

Buddy4study is a portal working on making the students, young aspirants and their parents aware about thousands of scholarships opportunities created and promoted by government, foundations, trusts, NGOs, and philanthropic communities. It provides the authenticated information platform to explore at one place about all such opportunities.

It also ensures that students and parents receive such information on right time through various channels throughout the year. The firm has launched a unique scholarship alert service over SMS to provide time critical, actionable information about the same. The alert service can be subscribed to by the students themselves, teachers and parents. Some of the tools

Making the students, young aspirants and their parents aware about thousands of scholarships opportunities created and promoted by government, foundations, trusts, NGOs, and philanthropic communities

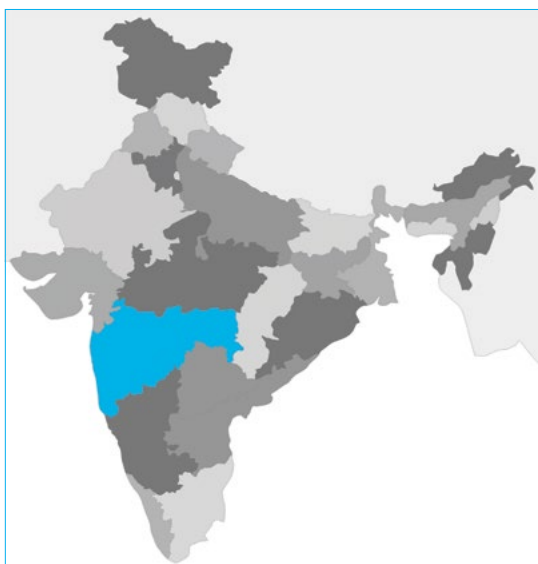


used are as follows: scholarship SMS alert service, scholarship Guidebook for school students, and application support provided to school students through groups in school territories.

Subscribing SMS alert was not enough, therefore, Buddy4study provided information through offline means like a guide book—the Buddy4study scholarship and entrance exam guide book lists more than 150 scholarships, apart from details about entrance exams. The guidebook also provides information on how to fill in application forms, myths and confusions, major eligibility criteria, types of scholarships, special exams, entrance exams and an exhaustive list of school scholarships.

Reach & Road Ahead

More than one lakh SMS alerts are sent to more than 1,700 subscribers – include students, parents & teachers. The scholarship guidebook for school students is another attempt to sensitize and educate community about available scholarship opportunities at one place. More than 500 books have been sold. Buddy4study claims to have made more than 50,00,000 students aware about the scholarship opportunities. The organization has also published a scholarship guidebook and have partnered with leading English language and vernacular media publications to extend its reach.



Mobiles for information & dissemination

Arogya Sakhi

Organisation
ARMMAN

Project Location & Coverage Area
Maharashtra

Project URL
www.armman.org

Area of intervention
Health

Health friends for the rural women and girls

“Arogya” means being healthy and “Sakhi” means a friend. Arogya Sakhis (ASs) are women selected from the villages and play the role as health friends for the rural women and girls who can freely discuss their health problems, access information, health services, practices and more.

Arogya Sakhi is an initiative of Armaan, provides home based after work hours antenatal and pregnancy care to rural poor women in Maharashtra through a network of ARMMAN trained Arogya Sakhis to conduct enrolled woman’s gestational stage as well as infant’s age based diagnostic tests and provide referral service. Armaan has provided mobile phones equipped with an encoded mechanism to record the diagnostic test data, referral service and additional information provided.

The app works as a handy job aid to ARMMAN trained ASs to recognize whether the infant is growing normally or is either showing growth faltering or other danger signs like neonatal jaundice, cough beyond 21 days, and fever beyond 7 days and so on. In addition, the app indicates to AS what response action she should take based on a standardized instructions manual given to her. The project has also provided the ASs with a diagnostic tool kit. Project officers, project doctor and project head can view the specifics of home based care delivered by ASs in real time and ensure that the beneficiaries receive quality care.

A voice call and animation service in the local dialect that disseminates timed and targeted information directly to the pregnant woman and mothers, making use of the commendable mobile phone penetration in

Using mobile app to conduct enrolled woman's gestational stage as well as infant's age based diagnostic tests and provide referral service



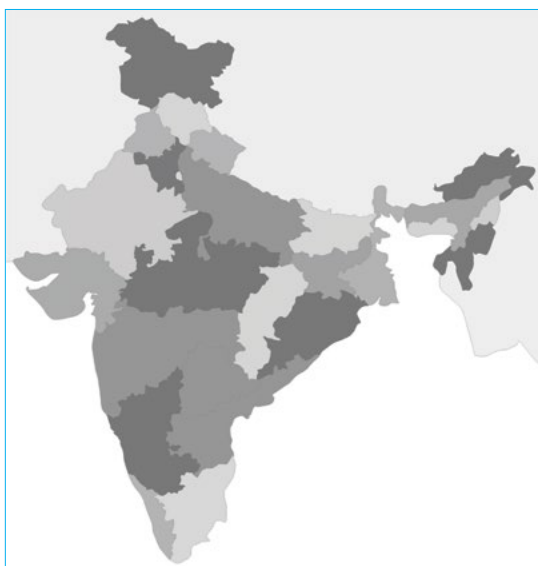
India, may be an improved way to ensure that messages reach their target audience. The message delivered to ASs is available in Hindi and Marathi. An experts committee from Federation of Obstetrics and Gynecological Society of India (FOGSI) and National Neonatology Forum, Maharashtra have perused the messages and ensured that the messages speak to the specific needs of the women from Maharashtra.

Reach & Road Ahead

With the support of DFID in 250 villages of Oshmanabad, Solapur and Washim district of Maharashtra, ARMMAN has already trained 83 Arogya Sakhis and by the end of RCT would have trained 250 of them. DFID has funded 90 out of a required number of 250 tool kits.

The health entrepreneurs are trained to provide comprehensive home based antenatal, postnatal and infancy care including performing diagnostic investigations and prompt referrals in case of high risk factors.

Since the launch of the project, it has provided 59 ante natal care voice messages; seven post natal care messages; 62 infancy care messages; four gynecological animations; four pediatric animations and a mobile app to record diagnostic tests performed; test results; referrals made; and additional information given.



Mobiles for information & dissemination

English Dost

Organisation

Blue Hat Education Pvt. Ltd

Project Location & Coverage Area

Pan India

Project URL

www.englishdost.com

Area of intervention

Education

Mobile app for learning English

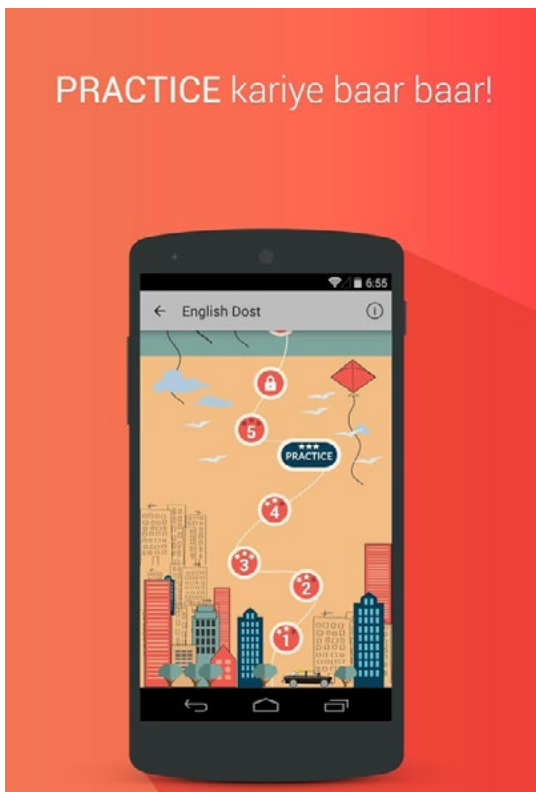
The lack of proficiency in spoken English often is a hurdle to better prospects. Given this scenario, the need for effective language teachers is on the rise – both virtual and physical. English Dost is a mobile app that helps people from smaller towns and cities to learn to speak English fluently.

English Dost is an Android app developed by Blue Hat Education Pvt. Ltd. to help people in the age group of 16 – 25 years and measure their English speaking ability through a score and improve it with targeted practice. The app is specifically designed for those who know a little English, but have trouble speaking. English Dost primarily trains the listening and speaking skills – most used while communicating and helps people become fluent in English. This involves training the auditory centres of the brain as opposed to visual centres, which are required for reading and writing.

The training app is in the form of a speaking game (in English, of course) where the user plays the role of a person starting a new job. The app takes the user through a story where he/she participates in simulated conversations with colleagues, friends, and family. At every stage when the user speaks, the app uses speech recognition patterns to identify the player's mistakes and then provides targeted feedback.

A 'conversation' thus is the main learning unit. The learner listens to the other party speak in English, gets a native language prompt and translates it and speaks back to the app in English. The learner is then presented with immediate feedback and score depending on accuracy (grammar) and

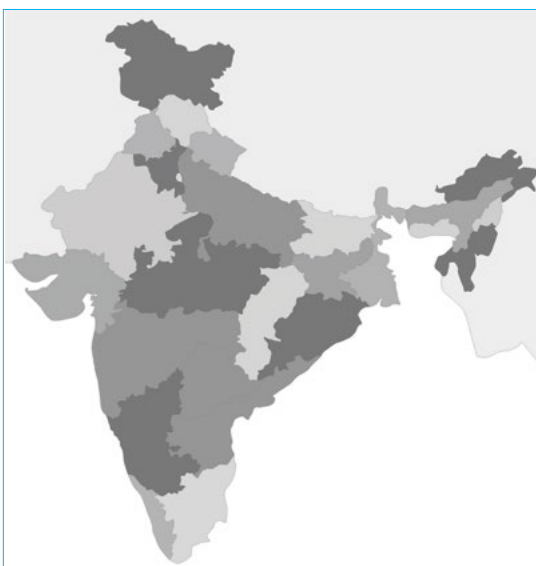
Helping people to measure their English speaking ability through a score, and improving it with targeted practice



fluency (speed of response). The conversations are contextual and real-life based and helps the learner in actual life. The app uses gamification techniques and makes learning fun with points and badges rewarding better performance. The user data is used to personalise the content and change it based on learner skill level for best learning.

Reach & Road Ahead

The company has invested US\$25,000 for the development of mobile app. Within three months, the app has recorded 10,000+ downloads, and initiated 35000 conversations practiced; 500,000 sentences spoken. The app can be downloaded from Google Play <https://play.google.com/store/apps/details?id=com.bluehat.englishdost2>



Mobiles for information & dissemination

Smartur 3D

Organisation

Trendyworks Technologies Private Limited

Project Location & Coverage Area

Pan India

Project URL

www.smartur3d.in

Area of intervention

Education

Experimental mobile learning for Science students

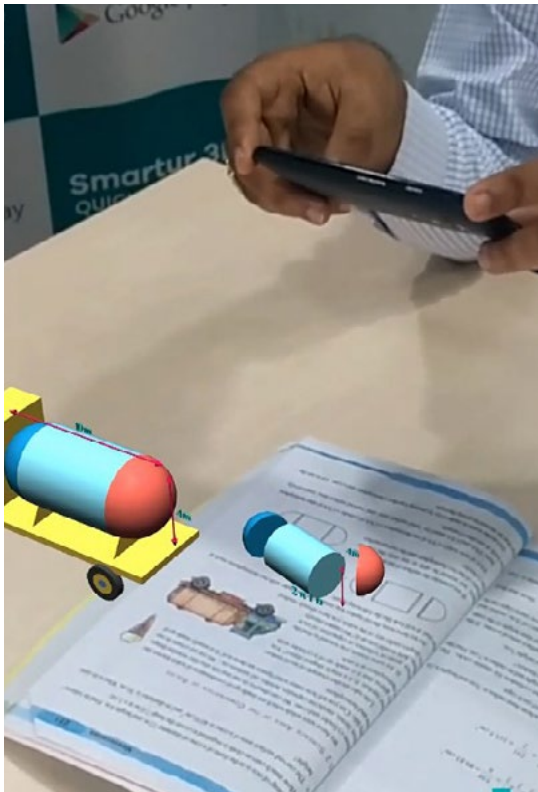
A Hyderabad-based start-up, Smartur.com, is set to bring in hitherto unheard of experiential learning into Indian classrooms at affordable costs.

Smartur 3D is a mobile app developed by Trendyworks Technologies Private Limited and make learning experience interesting for subjects like Mathematics and Science. Smartur 3D was initially launched as a desktop software in early 2014. By late December 2014, the company launched as mobile app, making it a universal library of science models in order to make it compliant with curriculum regardless of the school board, country, or medium of instructions. The app is also mapped with CBSE and NCERT contents. Student can study science, solve complex mathematical problems, answer questions and expect to score great in board exams.

The app has a number of features hitherto unseen in the education system in India. Students can also experience stunning models in stereoscopic 3D and interactive 3D. Each topic is further subdivided into components for learning, exploring and also certain challenges to test the child's grasp of various topics. Features like study module, flash cards for quick revision of the concepts and game based practices are also included. Also, each of the problems comes with an entire solution, which helps out the students whenever they aren't able to solve a problem appropriately.

The app is based on principles of neuroscience of learning and psychology of motivation. The app, which currently covers critical subjects of science and mathematics, also provides parents with comprehensive analytics to monitor the progress of their children. It has been made available

Universal library of Science, regardless of the school board, country, or medium of instruction

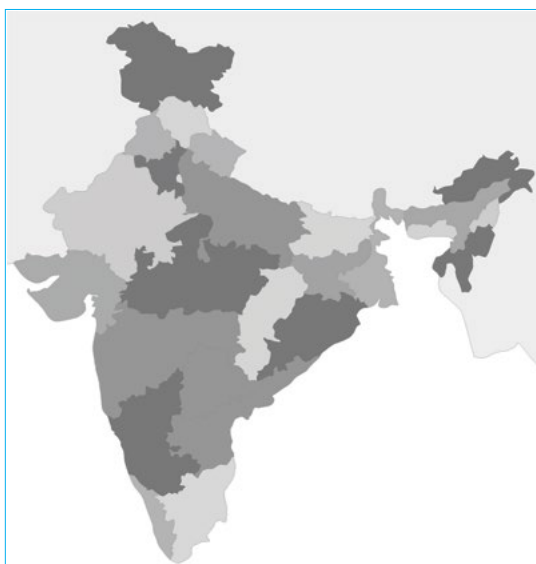


on Android devices for free download from Google Playstore. Currently Smartur 3D is available for Science, especially Biology. The company is in the process of developing Smartur 3D content for other subjects like Chemistry, Physics and Geography.

Reach & Road Ahead

Smartur 3D App has been developed at a cost of Rs. 15 million. The entire application for a particular subject is available as a School Site license for just \$99/year. This allows the school to use the software in all classrooms and computer labs for a flat annual fee.

The app was launched in March 2015 and has garnered over 40 thousand downloads in India. The company has plans to monetize the app by charging a reasonable fee from the academic year 2015 starting June onwards. The company is planning to have its Smartur3D solution in around 1,500 private schools in the next academic year.



Mobiles for information & dissemination

Lab-on-a-Tab

Organisation

Agastya International Foundation

Project Location & Coverage Area

Pan India

Project URL

www.agastya.org

Area of intervention

Education

Knowledge creation by curiosity of children

The 'Lab-on-a-Tab' project, implemented by Agasthya International Foundation, an NGO, and Lenovo is inspired by the natural potential of children to remain 'curious', and their ability to 'construct' knowledge on their own. It has been especially designed for government school students, who may not have experienced interactive learning or touch screen mobile technology before. Agasthya's mobile labs carry these tablet computers along with hands-on science kits to government schools. Children can choose from a variety of topics in Physics, Chemistry and Biology, and perform engaging experiments both virtual and hands-on.

It combines the excitement of using touchscreen technology, with easy to learn science content to provide a 'Self Learning' platform for children. The child decides the pace of the lesson, thus suiting learners with varying abilities. There are assessments at each stage to evaluate whether the learner has understood and assimilated the content. LoT assesses learning outcomes instantaneously through challenging projects which require the application of knowledge.

The app currently runs on Lenovo Ideapads which have sophisticated features and are robust, with a long battery backup. These tablets are suitable even for schools with power shortages and limited internet connectivity audio-visuals facilitate both auditory and visual learning, while hands-on activities and touch screen technology exercise the students' motor and tactile skills. These tablets have number of interactive experiments on physics, chemistry and biology. It includes six modules on topics such as plants, food, matter, water, air, volume along with various

An app for government school students, who may not have experienced interactive learning or touch screen mobile technology before

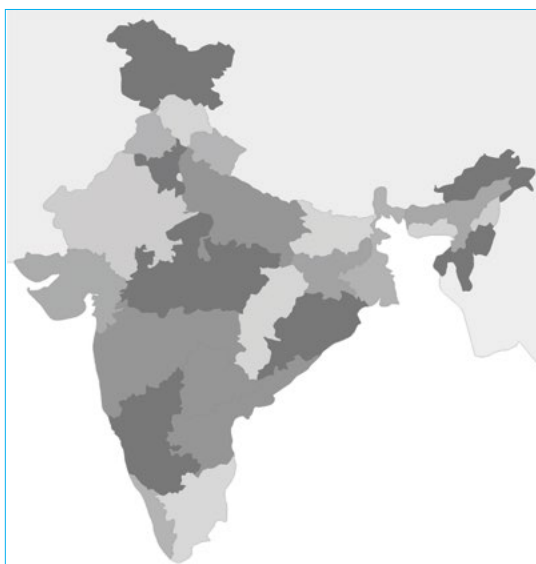


videos and e-books. The entire content is in Kannada as the tablets are specifically designed for government school children who are more fluent in the language.

Reach & Road Ahead

By providing children from economically disadvantaged backgrounds with access to Science and Technology through this programme, Agastya seeks to supplement the existing methods of teaching in government schools. The content was made in Kannada to make learning easier for children who are comfortable in the local language.

Initially, the project has been implemented on a pilot basis in five government schools within the City, involving 150 students and four other schools around Kuppam, involving 108 students studying in classes' IV - IX. As many as 160 tablets have been provided in the nine schools. The project has been implemented in a few schools in Pondicherry on a pilot basis as well. The pilot phase in Karnataka will be for a period of three months, after which a decision will be taken whether or not to scale it up.



Mobiles for information & dissemination

Panini Keypad

Organisation

Luna Ergonomics Private Ltd.

Project Location & Coverage Area

Pan India

Project URL

www.paninikeypad.com/index1.php

Area of intervention

Education

Breaking the language barrier

Panini Keypad was developed and introduced by Luna Ergonomics in year 2008-09 as a disruptive technological intervention. It is a virtual keypad that has broken the language barrier for the use of a ubiquitous technology in today's world. The Panini Keypad allows writing natively in any Indian script without any familiarity with English characters and is therefore ideal for the vast majority of India, a country where there is a need to support many languages together on phones.

The Panini Keypad uses artificial intelligence to accurately estimate only the characters that we could be typing and places them to our fingertips. The prediction is based on the statistical nature of the language extracted from mining large quantities of its text obtained from the public domain. It enables the user to type in any regional language of India on the mobile like Hindi, Marathi, Gujarati, Bengali, Oriya, Punjabi, etc.

This application runs on Java handsets as a J2ME software application. Main features are single key press type, touch screen compatibility and fast input system. It is very easy to learn for users of all age groups. The feature "Clever texting" lends statistically the correct letter/ character prompting on the screen, which is a unique quality of this virtual multi-lingual keypad.

Reach & Road Ahead

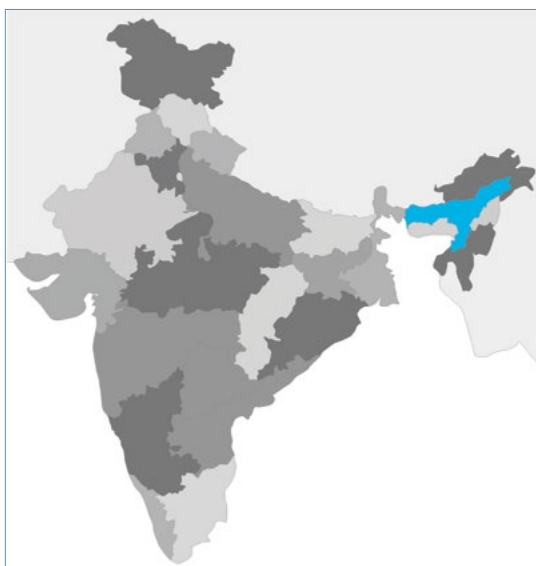
This is a low cost (non-smart) phone in which the Panini Keypad technology has been embedded in hardware and is the default editor. Using Panini keypad, user can write everywhere on the phone in all Indian languages. Store Address Book; Send SMS, Email, Facebook etc. Being device agnostic,

A virtual keypad, allowing to write natively in any Indian script without any familiarity with English characters



the Panini Keypad is also applicable for other digital devices such as IPTV, STB, ATM, Touch screen kiosks, gaming consoles and others.

The user can choose his language and start writing. It has been developed for both low cost touch screen phone and low cost button phone. The Panini Keypad is already working on all types of smart phones for Hindi, Bengali, Telugu, Marathi, Tamil, Gujarati, Kannada, Malayalam, Oriya, Punjabi, Assamese, Urdu and Nepali. This includes integrated support for all the Indian languages and interconversion via transliteration.



Mobiles for information & dissemination

Sarathi 104

Organisation

Health Management and Research Institute (HMRI)

Project Location & Coverage Area

Assam

Project URL

www.nrhmassam.in/sarathi/index.php

Area of intervention

Health

A health hotline

Health hotlines are medical call centers that provide health-related information, advice, referrals, and sometimes prescriptions to individual callers over a phone line. People lack basic information about the location and availability of pharmacies, clinics and laboratories and about prescription medicines.

People widely consult with informal, sometimes traditional, healthcare providers who may not be trained or ethical. Poor information leads to poor healthcare outcomes. Sarathi, an initiative of HMRI, is a 24x7 Health Information Helpline service that enables citizens from any part of Assam to call in and avail free services. It is an initiative of HMRI

Sarathi will enable people to have authentic and standardised medical advice from skilled medical professionals, including prescriptions through SMSs on mobile phones. The calls for advice will be classified into three categories, i.e, critical, serious and stable, and advice will follow on the basis of the nature of the call. In case of emergency requirements, Sarathi will facilitate 108 emergency service vans.

For non-emergency calls, the Health Advisory Officer (HAO) provides health advice by diagnosing callers using a state-of-the-art, validated, and standardised portfolio of protocols embedded in a Clinical Assessment Decision System Software (CADSys). With this software, HAOs are able to provide standardized and qualified medical advice to the caller and thereby allowing doctors to focus only on cases requiring special intervention. Callers can also get directory information and register complaints.

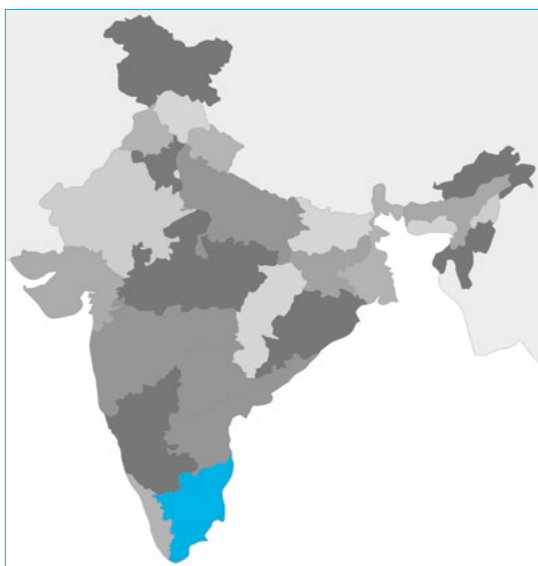
A 24x7 Health Information Helpline service that enables citizens from any part of Assam to call in and avail free services



Reach & Road Ahead

The application also promotes awareness of eye ailments, eye donation and availability of eye care services by showing audio-video educative tools to rural households. Furthermore, the application screens individuals and refers them to base hospitals for surgical interventions, guides identified individuals to forthcoming nearby camps through a geo tagging feature and uses captured information to plan future eye care service delivery activities.

Since its launch, 104 Sarathi has provided services to nearly 2.4 million people across Assam. The project has recorded over 30,000 cases of “Missing Children” during last three years. The government has provided 2500,000 medicine-laced mosquito nets to people living in malaria-affected bordering areas. Due to the project, police order has been issued to make reporting mandatory for all missing/recovery cases.



Mobiles for information & dissemination

EyeConnect

Organisation

Sri Kanchi Kamakoti Medical Trust

Project Location & Coverage Area

Coimbatore, Tamil Nadu

Project URL

www.sankaraeye.com

Area of intervention

Health

Android based mobile app to automate community eye care

Sri Kanchi Kamakoti Medical Trust has been providing quality eye care facilities for the poor since 1977, through the Sankara Eye Care Institute. In 2013, it launched Eye-Connect, a customised Android-based mobile application, to automate community eye care.

Their vision is to help people get freedom from curable and preventable blindness at affordable prices. They face multiple challenges on their way to provide better eye health to everyone.

The project addresses multiple challenges faced in outreach programs in remote areas such as lack of network connectivity and electricity, field workers' accountability, apathy of rural poor, dropout issues and data accuracy. To make the service delivery easier, they launched an Android mobile app Eye-Connect, to automate community eye care. The field workers from the institution use mobile phone to identify people in the villages who need eye care.

The identified patients are referred to the medical camps organized at a nearby location using a Decision Support System. This smart app also provides information about eye-donation, eye-care facilities and various audio-visual tools to make the information more interactive and comprehensive.

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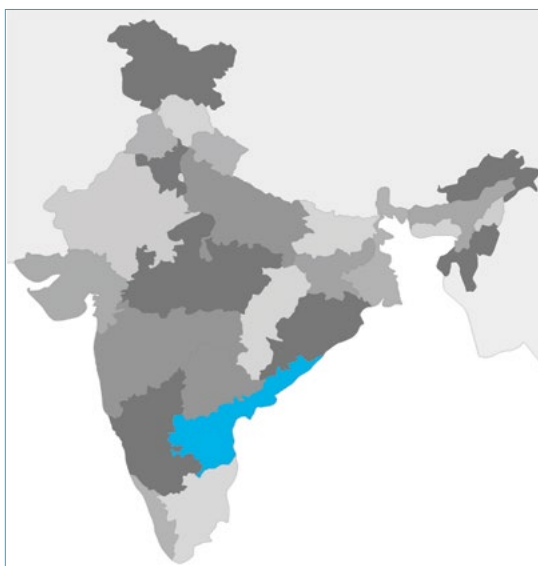
An Android mobile app Eye-Connect, to automate community eye care. The field workers from the institution use mobile phone to identify people in the villages who need eye care



and refers them to base hospitals for surgical interventions, guides identified individuals to forthcoming nearby camps through a geo tagging feature and uses the captured information to plan future eye care service delivery activities.

Reach & Road Ahead

The pilot project launched in 2013 has benefitted over 700 users so far. Established in 1977, The Sankara Eye Care Institution today has 13 eye hospitals across six states of India and provides eye care to the poor. A pilot project launched across four villages over a period of three months has benefitted 705 people.



Mobiles for information & dissemination

Mobile Harvest

Organisation

Mobile Harvest

Project Location & Coverage Area

Andhra Pradesh

Project URL

www.mobileharvest.in

Area of intervention

Agriculture

Literacy neutral creating & promoting stories

At a time when even documentary filmmakers are looking for a hint of glamour in their subjects, young Arjun Pandey goes in for a grave hard-hitting issue and accords it appropriate treatment. The young filmmaker probes the issue of farmer suicide in his film Life Apps. The 30-minute documentary, that was also shown in Delhi, sheds light on the lives of these farmers and the reasons that push them to take their lives.

The journey for Mobile Harvest started sometime in 2008 when Sachin, during his masters degree, started thinking about building a text input free contact book for people who currently use their phones along with a diary full of phone numbers that they want to dial. His insight came from observing people back home who were using mobile phones like they had been using their fixed line phones for decades – not storing phone numbers in the phone but carrying around a phone book in their pocket to call people.

Mobile harvest is a networking platform that allow members to create, access and promote stories, while being literacy neutral, thereby having the potential to have a wider reach. It is a very simple, easy-to-use application and in a two way networking platform. With three taps on a button, the user can record success stories, and with three taps on another button, anyone can listen to these success stories and learn from them.

The Mobile Harvest team, Sachin Gaur, Prashanth Pattabiraman and Jayvardhan Jaju, conducted a pilot in Andhra Pradesh, which was encouraging for scaling-up. The larger purpose of the initiative is to

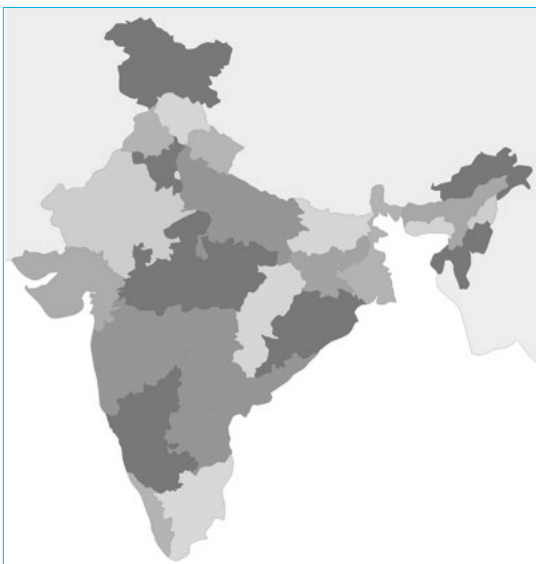
A networking platform through mobile phones that allows members to create, access and promote stories, while being literacy neutral



disseminate useful information about successful practices being employed by farmers/ other innovators, to create a feedback channel. This will lead to the formulation of an information repository that can easily be accessed via mobile phones, like Wikipedia on the web.

Reach & Road Ahead

The application works on android systems only, and the organisation is planning to launch it on Blackberry and Nokia mobiles soon. Thus, to ensure wider base of users, it should be made compatible with multiple handsets/ operating systems. Mobile Harvest also enables organisations to understand the communities in a better manner and interact with them, which may give them a voice and influence decisions, depending upon the use of the platform.



Mobiles for information & dissemination

mGurujee

Organisation

mGurujee & Aircel

Project Location & Coverage Area

Pan India

Project URL

www.mospay.com

Area of intervention

Education

Mobile app for test preparation

The use of technology now-a-days has been increasing for myriad purposes. People are increasingly accessing the value added services on their mobile phones. There are times when a person needs to get access to important information, like while he/ she is away from home, or travelling, or wants to revise the material while waiting for an interview, etc. in such situations, a simple intervention of technology can help the students and job aspirants.

mGurujee, allows users to download questions and take tests to evaluate themselves. The service also allows people to receive reference content even if they are outside and away from their books. Users just need to register at the mGurujee portal to access free content.

mGurujee is a way to get quick access to the reference materials, textbooks, and other extensive learning content. It contains extensive content in the areas of test preparations (engineering, management, civil services, medical and other entrance exams) apart from content on skill enhancement, vocabulary, history, arts, etc. One can also undertake many certifications on this platform, by studying and taking up the tests and quizzes. The mGurujee application can be downloaded along with the question sets on the mobile phone, and it can be easily accessed even when one is outside the network area. Presently, mGurujee has 28 local games and designed mobile games that helped children learn new words and sentences.

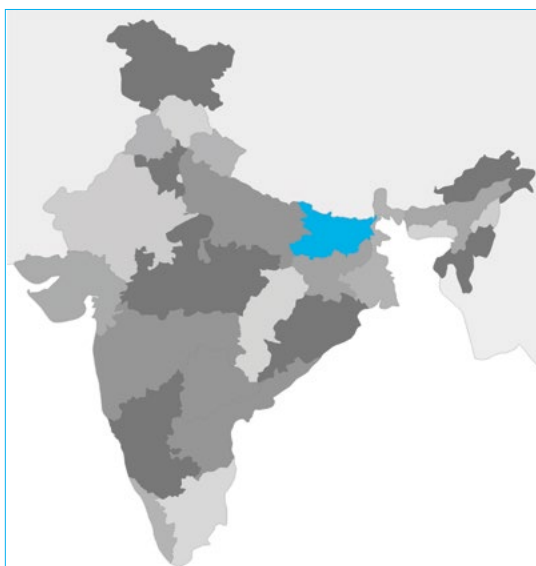
Quick access to the reference materials, textbooks, and other extensive learning content through mobile apps



Reach & Road Ahead

The site mGurujee has reinvented itself as a learning mobile app store and several leading mobile service operators, app stores and handset manufacturers are working with the company. Later, in 2009, Aircel launched mGurujee as a Value Added Service (VAS) on its network. The VAS has multiple modes to aid learning, like practice mode, quiz mode, timed mode, and tutorial mode. Users can download MGurujee application and Question Sets on their phone. For downloading the application Go to “Education On the Move” section under the “Services” option in the www.myaircel.com web portal from your phone browser for downloading the application. Users can download questionnaire by paying INR five per question set or by subscribing at Rs. 30 per month.

According to the Google page rank analysis, the URL of mgurujee.com has a page rank of 2/10. It receives about 125 unique visitors every day as per the analysis, which is good amount of traffic. The data, thus, shows that the website is also getting good traffic, and the mobile based platform has also received good amount of usage.



Mobiles for information & dissemination

i-Saksham

Organisation

i-Saksham Education and Learning Foundation

Project Location & Coverage Area

Bihar

Project URL

www.i-saksham.org

Area of intervention

Education

Low cost education through tablets

i-Saksham provides in-situ education and skill development services in remote, isolated, and backward regions using digital technology and content. Low cost android tablets are used as a platform for education delivery. These tablets are loaded with digitized content on elementary education, free android apps on General Knowledge for various competitive examinations, and video lectures on various vocational courses. Solar charger kits are provided in areas without electricity. The services are delivered either by community tutors or school teachers.

The intervention has made pedagogy customized, and interesting for students; and has enhanced the effectiveness of teachers. Arithmetic lessons through games successfully engage students and makes Mathematics learning a pleasant experience. Animated videos make theoretical lessons more exciting for students to grasp. Video lectures replace the need of physical lecture by teachers to some extent. Students are grouped on the basis of their learning level. These groups can go through lessons as per their learning need. The result is huge improvement in learning level of students.

The best quality education material becomes accessible to poor students at their door steps with flexible timings. This regular flow of disposable income in their hands has huge socio-economic significance. They become economically independent. Their respect in the community grows. Self-respect of young girls reaches new heights.

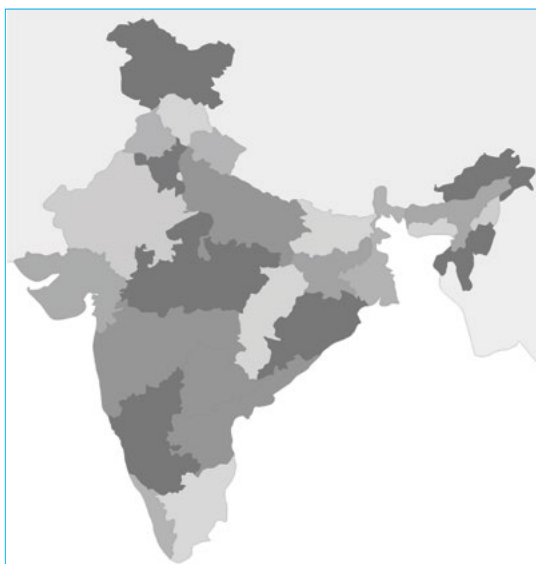
Providing in-situ educational and skill development services in remote, isolated, and backward regions using digital technology and content



Reach & Road Ahead

Youths who act as community entrepreneurs are able to make Rs.2000-Rs.2500 per month by imparting tuition to poor children; teaching computer skills/other vocational courses to youths and self-learning; and helping community access information through internet at very nominal fee.

The total cost of the project is 12000 per student. As of now 70+ tablets have been crowd-sourced through individual philanthropy and are placed with Residential Bridge Course schools, Remand Homes, Schools, Social Workers, Community Tutors and student study Circles in Munger and Jamui Districts of Bihar, India. The organization is aiming to provide quality elementary education to 5 million poor children, skilling 50,000 youths to be community tutors, and five lakhs youth skilled in various vocational trades by 2025.



Mobiles for information & dissemination

Job Seekers

Organisation

British Council India

Project Location & Coverage Area

Pan India

Project URL

www.britishcouncil.in

Area of intervention

Education

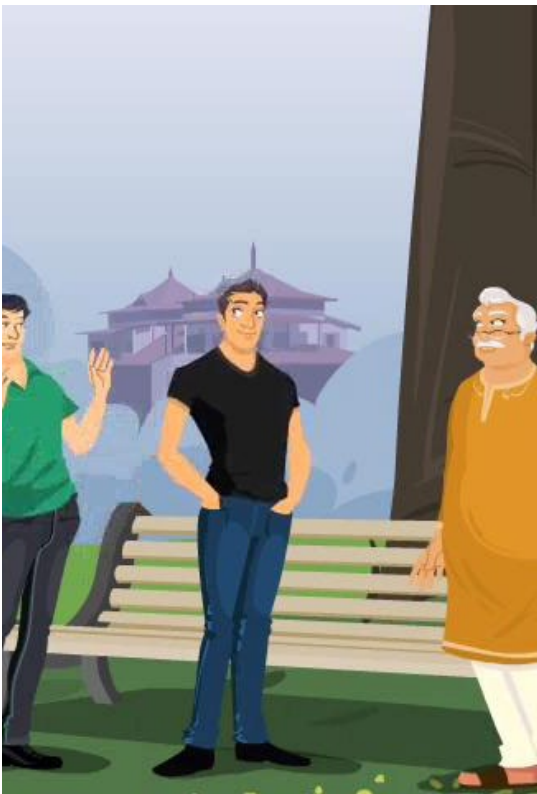
Mobiles for supporting frontline workers

India has 356 million people living in between the age of 10-24 years. Keeping in view that India is one of the youngest nations worldwide; British Council launched a mobile based initiative, Jobseekers in October 2012 that is a resource kit for advancement of livelihood and employment opportunities for youngsters in India. Based on storytelling formula, JobSeekers a series of 90 animated videos, which follow the story of four characters in their search for jobs. Through JobSeekers, young people can improve their vocabulary, pronunciation and listening skills. Jobseekers follow 4 characters – Neha, Arun, Farah and Rohit, as they tackle job applications and interviews while presenting themselves in the best possible light to potential employers. It also assists its users in writing CVs and job applications and giving interviews. The app helps a job candidate prepare for different stages of recruitment, starting from writing a resume to what to wear to an interview. The content is mainly aimed at giving tips or generic information regarding the job-seeking process. The application gives information in four areas: first, useful vocabulary for the workplace; secondly, know-how of writing job applications and CVs; thirdly, how to be successful at job interviews; lastly, developing listening skills.

The language content is aimed at pre-intermediate level learners of English, however the input on employability skills will be relevant to all.

It can also be downloaded onto any internet enabled phone or tablet as a set of videos via Airtel Classroom. To include the feature phone users, Jobseekers is also available in an IVR (interactive voice response) form. The IVR product is audio only and has bilingual support. So, the dialogues

Resource kit for advancement of livelihood and employment opportunities for youngsters in India

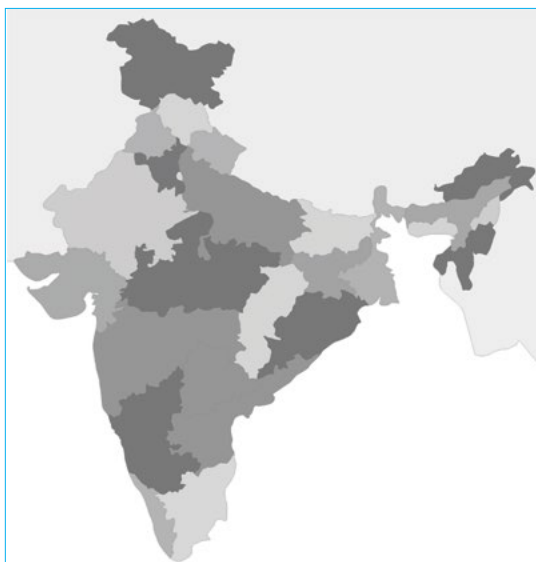


taken from the animated videos are available in both Hindi and English. Each lesson also has a corresponding SMS, which is pushed to the subscriber after the completion of the lesson. The content is in the form of short videos. This visual experience along with the clear audio and simple instructions supports learning at a range of levels.

Reach & Road Ahead

The business model of Jobseekers takes a so-called freemium approach to monetization. The application can be downloaded for free on the mobile. The first unit of six input videos and a quiz is offered for free; with a pack of 12 additional units each of six videos and one quiz costing 90 rupees; INR 600 for the full course of 13 Units with 90 Episodes. The IVR product is available at Rs.599 for 78 episodes. Till now, the Android app has been downloaded 13,112 times and for the desktop version, 554 licenses have been sold.

The app is compatible with all Android operating systems and can be accessed on mobiles as well as tablets. Presently there are 10,000 to 50,000 installations of the app with an average rating of four on Google play.



Mobiles for information & dissemination

mDiabetes

Organisation

Arogya World

Project Location & Coverage Area

Pan India

Project URL

www.arogyaworld.org

Area of intervention

Health

Fighting diabetes

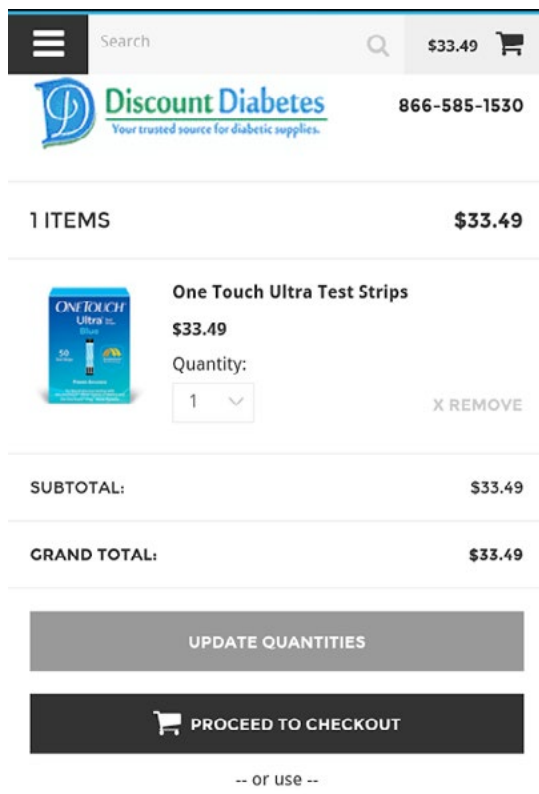
Sixty-plus million Indians live with diabetes and one million die from it each year. Indians get the disease an average of 10 years earlier than counterparts in the West, often in their 30s and 40s.

mDiabetes initiative was launched by Arogya World in partnership with Nokia (now known as Microsoft) across the India in January 2012. mDiabetes was designed as a population-level nationwide public health intervention using mobile technology to establish health behaviour known to prevent diabetes. The objective of the project is to disseminate vital information about Type 2 Diabetes and further educating them about diabetes and its prevention through SMS twice a week, in 12 languages. Arogya World initiated the programme in partnership with Nokia Life to target one million users of Nokia. Arogya partnered with various organizations to play different role in the project. These partners include Nokia Life, Emory University, Johnson & Johnson, Aetna, Biocon and Ipsos.

This platform uses SMS for widely distributing messages to be used for raising awareness and providing training for people with diabetes who have been identified by the National Center for Combating Diabetes, as well as training health professionals via cellular phones.

The content is developed by Arogya World's Behavior Change Task Force of medical, health promotion and consumer experts from the US, UK and India. Emory University has provided behaviour change and diabetes expertise for content development. Arogya World developed the 56 text messages with Emory University in late 2011, based on science and

Disseminate vital information about Type 2 Diabetes and further educating them about diabetes and its prevention through SMS twice a week

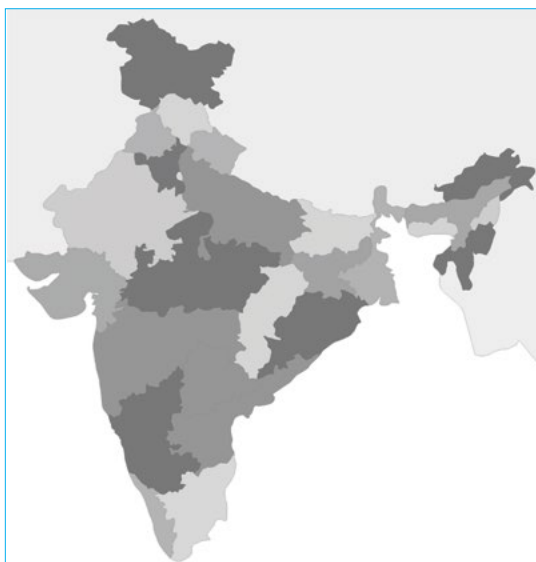


behaviour change theory, and then, with Ipsos, consumer-tested them in simulated conditions as well as in the real world. Arogya World then refined the messages, adapting them culturally for Indian audiences based on consumer feedback and review by its Behavior Change Task Force. Nokia Life provided the translation and transmission infrastructure, and transmitted more than 56 million mDiabetes text messages to the consumers throughout 2012.

Reach & Road Ahead

mDiabetes program implementation began in January 2012 and all 1 million consumers have been enrolled in the program through 2012. To date 33 million messages have been sent i.e. the program has achieved 33 million consumer-touch points. Some 70,000 consumers have completed the 6 month program.

Arogya World is willing to expand the programme globally in partnership with global health organizations, governments and private sector partners. In order to make the content rich, the organization is also working on video-rich content on diabetes and its complications, including stroke, heart disease, kidney failure etc.



Mobiles for information & dissemination

Friends2support

Organisation

Friends to Support

Project Location & Coverage Area

India

Project URL

www.friends2support.org

Area of intervention

Health

An Android app that allows access to blood donors

Four young software engineers worked together to develop mobile app Friends2support so that citizens can access blood facility from anywhere in the country. Jayanth Justin from Kottayam in Kerala developed the Android App and is available on the Google Play. Another software engineer Auston D'sa from Bangalore developed the Windows App, while Abhilash Reddy from Hyderabad developed I-Phone App (iOS) and Jayant B working as SW engineer in Gurgaon (Haryana) designed the Symbian App.

The mobile app of the F2S uses SMS technology to send information about blood donors. Registered users receive SMS along with their user name and password when they registered as blood donors or request for forgotten password. They will get thank you SMS when they donate blood. They will get reminder SMS when they have completed three months from their last blood donation. After donating blood, donor name will be hidden till next 90 days to avoid calls to him. On 91st day his name will be automatically visible in the search results.

Friends2Support is an Android app that allow citizens to access blood donors anywhere. It is an extension of web based services and the app is available on Google Play. The app provides services including blood donor search within a specified geographical area, state, district & city along with blood group providing one touch access to a list of registered donors in an emergency, free of cost. Anyone from any part of the country can log onto this website or call toll free helpline number for a list of blood donors in their particular area. The website essentially is a database of blood donors in all the districts of any Indian State.

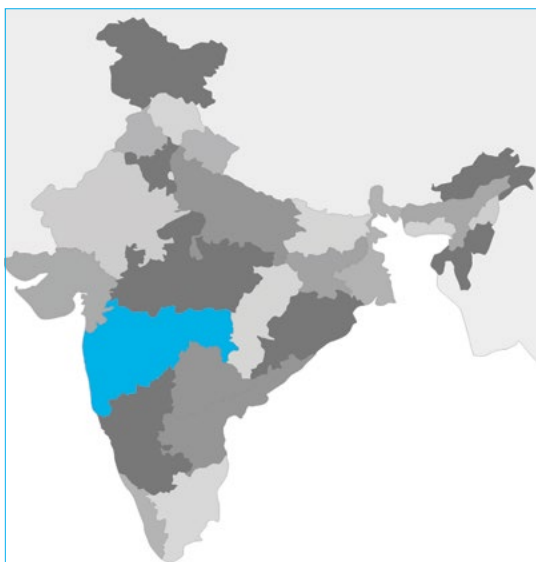
The app provides services including blood donor search within specified geographical area, state, district & city along with blood group providing one touch access to a list of registered donors in an emergency, free of cost



Reach & Road Ahead

Till date, the app has been installed by 5000 users and more 1.5 voluntary donors have signed up for this service. Recently the FB page has received 7,000+ likes. The organization is also trying to partner with various agencies such as SEEDS and Café Owners' Association based in Guntur that allows people to register themselves as donors and search for info on donors free-of-charge at their Internet centres in the city. F2S has compiled a comprehensive 'State-District-Location' database in the Country (almost 8000+ locations in India).

In the future, F2S plans to set up a Global Positioning System (GPS) tracker, which will automatically detect the location of the caller, and send details of available blood donors along with the status of the availability of the donor to the caller, through voluntary call analysts, having sound regional knowledge, in every single state.



Mobiles for information & dissemination

Loo Rewards

Organisation

Samagra Empowerment Foundation

Project Location & Coverage Area

Pune, Maharashtra

Project URL

<http://samagra.co/>

Area of intervention

Water & Sanitation

SMS-based incentive programme to tackle open defecation

About 60 per cent of Indians defecate in the open due to a lack of sanitary toilets. And when Swapnil Chaturvedi came to India from the U.S. in 2007, he was appalled by the lack of dignity and sanitation afforded by the country's dirty, under-ventilated toilets.

With grants from Bill and Melinda Gates Foundation, he initiated, the Samagra Empowerment Foundation to tackle the issue of open defecation. LooRewards uses an SMS-based incentive program to give redeemable reward points to the urban poor for adopting healthy, hygienic practices like using a toilet, buying clean water, etc. Families receive reward points and updates directly on their phones, making the benefits of using the services, immediate.

User membership and usage is managed using the looRewards app that is installed on toilet operator's tablet. Toilet users become members of looRewards platform at their nearest community toilet. LooRewards solves technological challenges – it does data collection at individual or family level which include socio-demographic data, toilet usage data, hygiene data and health data.

LooRewards delivers specific, personalized insights and content to each customer, converting otherwise inscrutable data into actionable insights. Data visualizations enable users to get insight into consequences of their actions.

LooRewards solve technological challenges – it does data collection at individual or family level which include socio-demographic data, toilet usage data, hygiene data, and health data

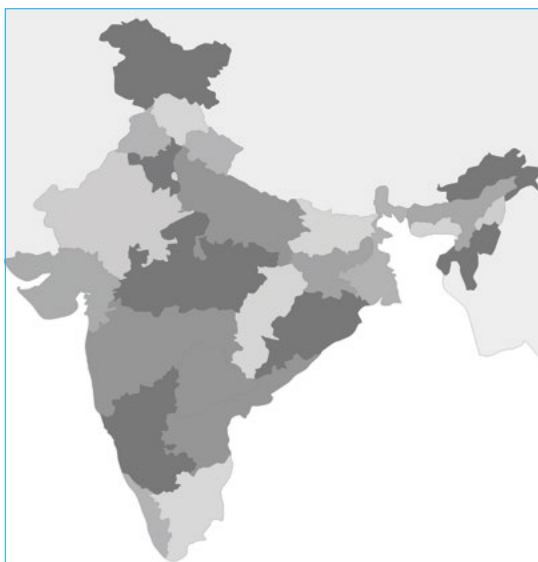


For the municipal corporations, it provides a data visualization platform, where it can monitor toilet usage and its maintenance. Operators in this model can retain all their collections as their income, so they are incentivized to engage more and more users. The end user is incentivized through reward points for early payment of toilet usage fees which can be redeemed at different vendor outlets.

Reach & Road Ahead

Samagra has partnered with the Pune Municipal Corporation (PMC) to redesign and refurbish community toilets used by slum residents. Samagra operates in three urban slums—Ramnagar in Warje Malwadi, Nehrunagar Vasahat and Shrawandhara—and looks after six communal toilet blocks. That's 128 toilet seats and 4,300 daily users, of which 2,098 are young girls and women. To use Samagra's toilets, slum-dwellers pay a monthly fee of INR 75 per family.

They receive an ID card which can be used at any Samagra toilet, any number of times. The operation model of LooRewards is to motivate people to pay, actively involves and incentivizes all the stakeholders – the end users, the government, local store owners, toilet operators and SHGs/ NGOs serving the community.



Mobiles for information & dissemination

Studycopter

Organisation
StudyCopter

Project Location & Coverage Area
Pan India

Project URL
<http://studycopter.com/>

Area of intervention
Education

Mobile-capable adaptive learning platform

Studycopter is the world's first online + mobile-capable adaptive learning platform that enables students to ace exams such as the GMAT, IBPS SO, IBPS Clerk, and more. Studycopter has launched with test preparation for GMAT before expanding to other tests. The startup was a part of the iLab incubator and went on to raise a seed round from the Batten Foundation.

The cloud based solution also offers a comparison engine which is basically a recommendation feature. It analyzes a student's current performance from his performance a week ago and then suggests steps to be taken to improve it. Personalization of content is one of the important aspects for Content as a Service (CAAS) provider. The service also has options to share notes and tips with friends. The platform is available on Android, iOS and Windows. It syncs across devices, so that student can resume preparation from where student left off.

Studycopter also combines the best of both Self-Studying and Classroom Coaching. The company plans to introduce other courses like GRE, CAT and SAT in the coming months. It has plans to integrate features like "Ask an Expert" in times to come to facilitate students for clarifying their doubts. Studycopter has content license for five other tests but the first step is to build good traction for GMAT and make the adaptive model more meaningful by having more students use the platform. The app also maps performance of student and constructs an optimal examination preparation plan so that student can focus on key problem areas without wasting inordinate time on non-critical areas.

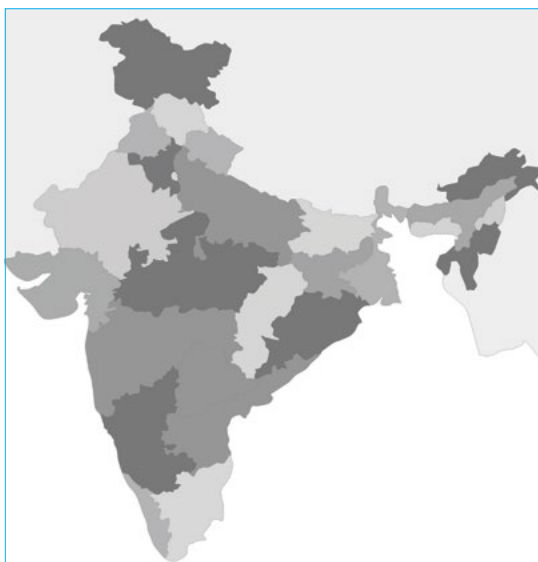
It analyses a student's current performance from his performance a week ago and then suggests steps to be taken to improve



Reach & Road Ahead

Launched earlier this year, the portal has managed to get more than 2,000 customers. It is mostly used by students. A few professors, teachers and institutes also use the service. At the moment, students can access Studycopter for free for seven days on the web or through the Android app. Once they are satisfied with the product and are convinced of its value, they can choose to buy a subscription for a limited time.

The current list price is INR. 1599 for a four-month subscription. Presently Studycopter raised Angel Funding from the Batten Foundation. Since its launch, Studycopter has seen students sign up from the Americas, Europe, and India. The organization has also signed agreements with educational publishers worldwide in order to provide academic resources such as mock exam papers, practice exercises and questions to help exam candidates prepare themselves.



Mobiles for information & dissemination

Touch-on-Cloud

Organisation

Harness Handitouch Pvt. Ltd.

Project Location & Coverage Area

Pan India

Project URL

<http://www.harnesstouch.com/TOC.html>

Area of intervention

Education

Learning operating system

Education is the most important pillar for human development. Touch on cloud has created a revolutionary new operating system to revamp how students learn in class and how teachers engage them inside the classrooms. It challenges the idea of traditional learning and enables the comprehensive use of interactive technology inside classroom as well as outside it using the Cloud.

Harness Handitouch Private Limited (Harness) is an award-winning education technology company based in Chennai, India, founded in 2011 by graduates of ISB (Indian School of Business), Subramanian Viswanathan and Kuljit Chadha. It is like an interactive classroom where once the teachers download the Unio class from Edmodo, it gets installed for her selected groups. Instant use of teacher white boarding and teacher files can be launched and experienced. The students on the other hand do not need to copy notes as they are available as stored notes in the system. On the top of it students can also add on to the notes from their side. A two-way class approach is followed with teachers giving inputs in one hand and broadcasting students' screen and also making them the presenters.

With built-in quiz, assignment, lesson management, student management and evaluation tools, Touch-on-Cloud functions as a learning operating system, capturing all learning and teaching activities. Touch-on-Cloud has applicability across educational segments--K12, Higher Education and Coaching, and implementation model to suit budgets of all sub-segments. In ICT-enabled classrooms, teachers have no control over multimedia content and here is a need to keep shifting between the projector, the

Using networked tablets, laptops or PCs in the classroom, Touch-on-Cloud provides new in-class pedagogy where teacher white-boarding is broadcasted automatically to all students



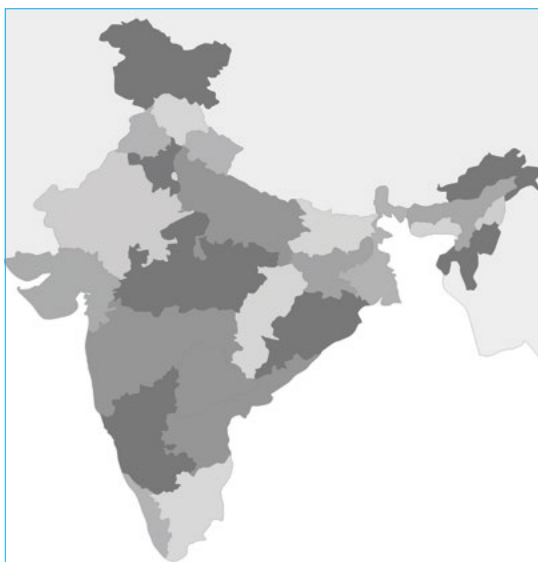
computer, the textbook and student activity. As a result there is lack of classroom collaboration and inefficient use of technology.

Touch-on-Cloud was developed to make teaching and learning more engaging, efficient and fun. Since teachers' notes and learning materials are broadcasted and saved automatically, students can concentrate on learning. With new pedagogies such as group work and student broadcast, classroom collaboration is truly redefined.

Reach & Road Ahead

It serves more than 10,000 learners and teachers across six countries through its team of 20 people dispersed across various cities in India and Middle East.

In the near future, the progress of cloud-based products is limited by broadband penetration and bandwidth availability. Once these issues are resolved, the cloud will start performing to its potential.



Mobiles for information & dissemination

Career Counseling

Organisation

Bharti Airtel

Project Location & Coverage Area

Pan India

Project URL

www.airtel.in/education-files/career-counseling.html

Area of intervention

Education

IVRS and SMS-based education services for Airtel users

Bharti Airtel has launched a new education service meant for mobile phones and tablets, called mEducation. The new service enables Airtel customers across the country to access a host of education services, including courses for language skills, entrance exam preparation and career counselling with just a few clicks on their mobile phones.

Career Counseling, an initiative by Airtel is an IVRS and SMS-based mobile Education service for Airtel users. It uses technology-enabled platforms to address the challenging issues of education. With this service, Airtel enables its customers to access courses for English learning; competitive exam preparation and career counseling on their mobile phones. There are lakhs of customers who are on Airtel who use the counselling service.

This SMS-based m-Education service platform enables Airtel mobile customers across the country to easily access a host of education services including courses for language skills, entrance exam preparation and career counseling from the best of universities and professors in the country with just a few clicks on their mobile phones.

Career Counseling is a voice based service that allows multiple users to connect with counselors on a voice call and get advice related to their job and education. Users can go for live counseling sessions by dialing 55077 (toll Free) or by dialing *321*850# or listen recorded content created by counselors. This content can be accessed without any time restriction by dialing 550779 (toll Free). Moreover, users can also seek expert advice by simply SMSing their questions related to job, career or education to a toll

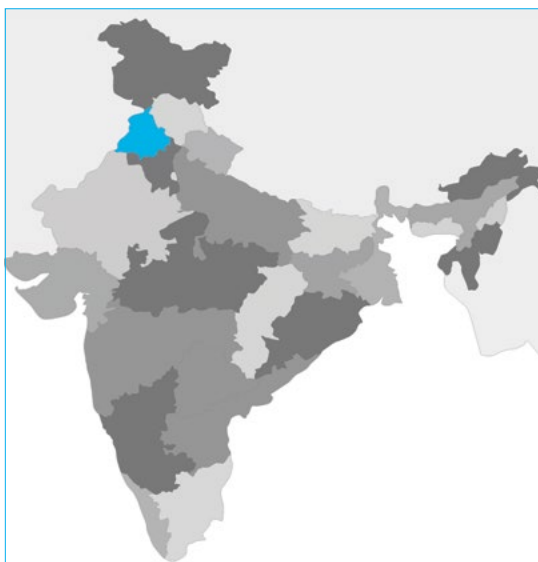
Providing educational services, including courses for language skills, entrance exam preparation and career counselling with just a few clicks on their mobile phones



free short code 5507755 and get answers written by experts in less than 24 hours.

Reach & Road Ahead

The service is available on subscription based at INR two per day. Users can avail career counselling sessions by paying a minimal fee of INR 15. The service is limited to Airtel customers across the country. Airtel will offer these educational value added services (VAS) through IVR, SMS and WAP. These services range from Rs 1.5/day to Rs 99 for a course, depending on the type of course a user wants to subscribe to. It offers English Guru (IVR) for INR 30/ 30 Days, Mock Tests (WAP) at INR 99 (12 mock Test) /INR 49 (5 Mock Test), Scholarship Alert (SMS) at INR 1.5 per day, among others.



Mobiles for information & dissemination

DHIS Mobile

Organisation

HISP India

Project Location & Coverage Area

Punjab

Project URL

www.hispindia.org

Area of intervention

Health

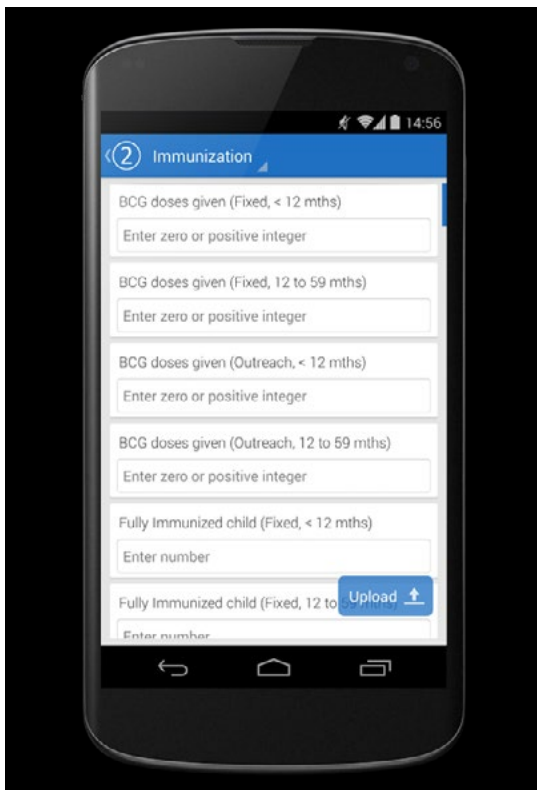
Mobile tracker to record community health information

DHIS mobile application was found by HISP India for the development related to the focus on a solution for consuming mobile technology to expand the reach of the Health Information System. DHIS Mobile application can be installed in low-end java phones. The software supports two reporting modalities such as aggregate facility reporting and name based or patient based tracking.

The main strength of this application is that they work well even when the phone is offline, which is when the phone has no data connection to the server. It supports health workers to report online or offline data entry and submission of the forms using mobile data (GPRS) or SMS. Data entered during offline mode is stored and can be submitted at a later time. The programme tracking supports the follow up of a patient through a programme such as a mother-child tracking, TB or HIV program.

DHIS2 also supports SMS-based functions like sending SMS to individual or groups of health workers or patients to remind them of an upcoming or missed visit, or as part of a general education programme related to a health programme. It also sends SMS for support or feedback purposes and registering and enrolling a patient in a health programme by sending an SMS. It also allows entering individual health data for a patient visit using SMS, and checking the status of a patient's follow-up using SMS.

Supporting health workers to report online or offline data entry and submission of the forms using mobile data (GPRS) or SMS



Reach & Road Ahead

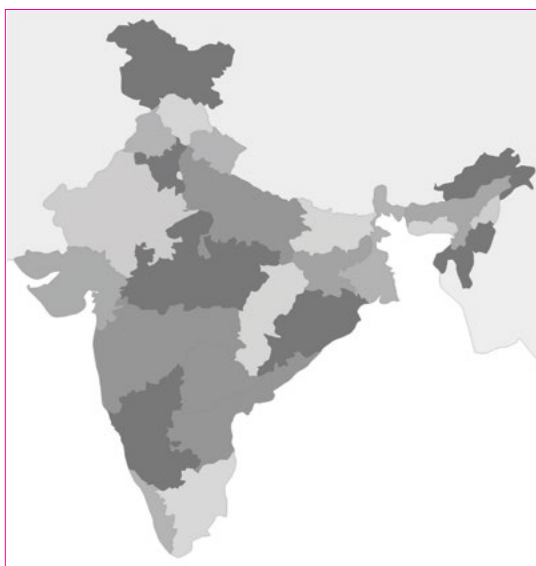
Department of Health and Family Welfare, Punjab decided to introduced DHIS mobile application for all 5000 health workers across the state, and for this the state bought phones and SIM cards for each health workers. HISP India designed and developed the sub center reporting application with month and daily report, and installed the application on phones and built capacity of all 5000 health workers.

HISP has also plan to implement the system in Andhra Pradesh, where tracking systems have been created for mother care, child immunisation, TB, HIV - all requiring longitudinal name based information support - and plans are afoot to extend to Nutrition Rehabilitation Centres and School Health, programmes which have similar needs.

MOBILES FOR MONITORING/TRACKING

Mobile-based technology, and its associated benefits of real-time data sharing and data analysis including SMS based system have enabled organisations and agencies to use monitoring and evaluation (M&E) data for better project implementation, output and outcomes. There are instances wherein mobile-based monitoring and data collection tools have helped to manage projects better with pre-loading of data, skips, validations, location (Graphic Information Systems – GIS), media (photos) .

The mobile based data collection service providers have rolled out software and systems to support M&E instruments. Services being offered and benefited from includes better control of field staff in M&E, access to the surveys and data; access collected-data in real-time. The choice of using a normal phone or using smart mobile devices has allowed for Mobile Apps with 'form-based interfaces' for data entry, location (GPS) tracking, and media (photos) and bio-metric data capture. The data collected through these Mobile-App based systems can provide strong audit controls because of the location and visual evidence that is electronically captured. Mobile-based monitoring activities have enabled to collect data and feedback from beneficiaries directly. Having access to ongoing data, instead of onetime annual report, allows understanding the real impact the support is having at the field level. Also, by requesting 'anytime and anywhere' access to project monitoring data, one can introduce a higher degree of transparency and accountability, at each level. To facilitate beneficiary participation provisions for toll-free IVRS (Voice) or SMS services are integrated. This has called for qualified technical skills among staff.



Mobiles for monitoring & tracking

Baby Vaccine Guide

Organisation

New Tech Fusion Cybertech Pvt. Ltd.

Project Location & Coverage Area

Pan India

Project URL

www.newtechfusion.com

Area of intervention

Health

Mobile based vaccination scheduler

Baby Vaccine Guide is a mobile based application developed by New Tech Fusion Cybertech Pvt. Ltd. The project is a vaccination monitoring system for baby's vaccination. Department of Family Welfare and WHO recommendation and IAP/IMA have been followed in order to mark a vaccine mandatory or optional.

Baby Vaccine Guide creates, follows and tracks the vaccination schedule for newborn babies. Once mother creates the profile of her kid by entering the date of birth and name of the baby, the app creates a complete schedule chart with the tentatively scheduled vaccination dates. The app is instrumental in tracking the immunization calendar.

It may be done individually for one/ more babies on one phone. The record of immunization is maintained by changing the background colour of the vaccine shown in the app. On the tentative scheduled date of vaccination, a notification alert will be sent by the app.

The schedule formation refers to the authentic sources such as 'Immunization Handbook for Medical Officers' published by the Department of Health and Family Welfare and WHO recommendations. On the basis of tentative scheduled date of vaccination, the app sends notification alerts to mother. The Vaccine Guide gives consumers to make decisions about vaccines, with clear discussions of childhood and adult diseases, their incidence, and the likelihood of exposure and complications

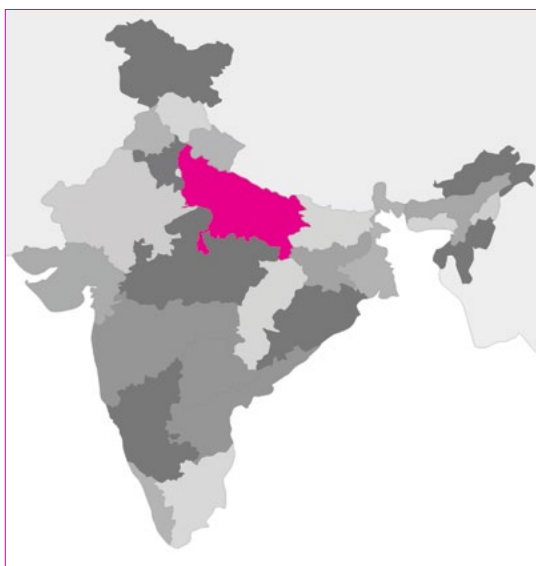
Once mother creates the profile of her kid, the mobile App allows keeping track of the vaccination schedule of newborn babies

Baby Vaccine Guide	
Arya	
15 Month	2016-02-02
18 Month	2016-05-03
2 Year	2016-11-01
4 Year	2018-10-30
5 Year	2019-10-29
Vaccine Left:	38
Total Vaccine:	38

Reach & Road Ahead

Baby Vaccine Guide is available in many regional languages – Hindi, Marathi, Tamil, and Gujarati. The app allows users to have backup on their server and they can restore their old data too. Parents can see the same data and synced with the server.

For improvisation, the app may also include features to record other information like baby’s height, weight, and other measures to track a normal and healthy growth of the baby. For a holistic monitoring, future up gradation of the app may also be done, e.g. putting the data of profiles of the babies on a common server, so that data can be retrieved in the case of loss/theft/ change of device or loss of app. Parents can make comments section against each vaccine about kids behavior or fever or any effect of vaccine and check the price of vaccines by various manufacturers.



Mobiles for monitoring & tracking

AAROGYAM

Organisation

District Health Society, Government of Uttar Pradesh

Project Location & Coverage Area

Uttar Pradesh

Project URL

<http://jpnagar.nic.in/aarogyam/default.htm>

Area of intervention

Health

An ICT-based community-centric approach for ensuring safe motherhood

‘Aarogyam’ is a Sanskrit word that means “complete freedom from illness”. Aarogyam is a mobile based community driven approach that aims to provide health care services at the door steps of the Uttar Pradesh citizens. The project was initiated by District Health Society, Government of Uttar Pradesh for ensuring safe motherhood and child survival components of Reproductive and Child Health (RCH).

Aarogyam involves active participation of all key stakeholders viz. local administration, health facilities and doctors, frontline health workers (ASHA, ANM, AWW) village heads and stakeholders to ensure that a pregnant woman is provided with ANC, PNC and complete immunization throughout the continuum of care.

Aarogyam maintains a village wise database of pregnant/lactating women, children up to five years of an area, which gets continually updated with new data generated on the field with the help of front line health workers. The database, thus, generated is the backbone of the software system used by Aarogyam. Once the data uploaded into Aarogyam software, automated calls are periodically generated to provide information on child immunization, ANC/PNC, safe delivery and pulse polio campaign through use of Integrated Voice Recording System (IVRS) and telecommunication technology.

The system not only provide beneficiaries with the information to be acted upon but also ensures that the services are delivered to the beneficiaries by generating automated alerts (vernacular voice calls/SMS) for the ANM and block level health officials, informing them of due services in their area.

Providing health care services at the door steps to Uttar Pradesh citizens

Health check up today for a healthy life tomorrow...

Now with
HbA1c, Vitamin D, B12 & Testosterone!

Aarogyam
Know it early... Exactly.

Presents
Aarogyam 1.3 profile

A unique diagnostic profile of specialised tests for a comprehensive health evaluation

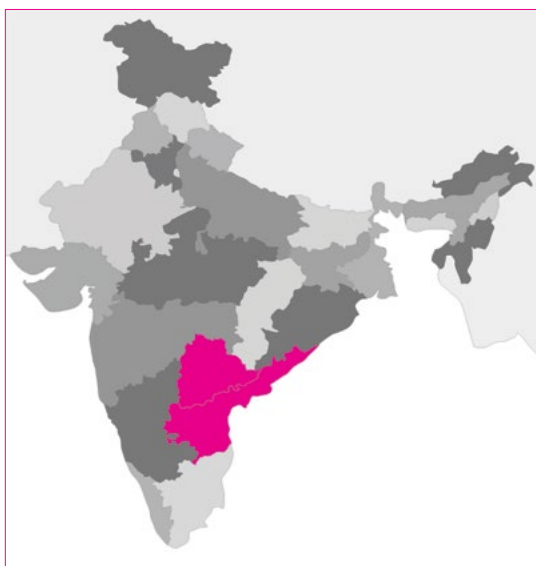
SPECIAL OFFER RATE

Some services available in selected cities within city limits.

Aarogyam uses a mapped database where each beneficiary is mapped with his/her village including the village head (pradhan), related health officials including frontline workers and health facilities. This multi-dimensional mapping gives Aarogyam the capacity to monitor and take proactive corrective measures on its own, even in the absence of human interface. e.g. if a woman is due for TT (Tetanus Toxoid) and she does not receive one, Aarogyam will not only report this to the beneficiary, but also to the village head and related health workers and subsequently to the health facility. Competent district authorities can also monitor and evaluate the performance and pendency at any level of the system, thus strengthening accountability and transparency.

Reach & Road Ahead

The expenditure incurred on Aarogyam can be classified under two heads – (i) set-up costs, and (ii) recurring costs. The total cost of implementing the project in one district is INR 22,20,000. Initiated in Bagpat and Amroha districts of Uttar Pradesh, Aarogyam was expanded to another eight districts of Moradabad and Meerut mandals of the state in 2010. The project has benefitted over 200,000 families. With the launch of Aarogyam project in 2008, there has been a remarkable improvement with respect to various indicators of maternal and child health. Immunisation of children has shown a positive trend in the project areas. Similarly, the number of institutional deliveries has increased in the targeted districts i.e. from 4,333 in 2008 to 12,774 in 2010. Funds for Aarogyam are secured under the Janani Suraksha Yojana of NRHM, Government of India.



Mobiles for monitoring & tracking

DruxOn

Organisation

Asmaka Technologies Pvt Ltd

Project Location & Coverage Area

Hyderabad, Andhra Pradesh

Project URL

www.druxon.com

Area of intervention

Health

An online healthcare services

If any patient is forgetting its medicine, Hyderabad-based Druxon provides healthcare alerts like Medication alerts, prescription refill alerts and immunization alerts to consumers. Founded in 2010, a for-profit Hyderabad-based company Asmaka Technologies Pvt Ltd. offers an online healthcare service druxon.com that uses technology to improve quality, timing and experience of health services.

The service has in place a system for individuals and caregivers to record and retain information pertaining to their health services. The system currently covers prescription administration, refill alerts and immunisation alerts using mobile phones.

Users can organise their medication on Druxon.com and get text message alerts reminding them of their medication or when to refill their medicine. With Druxon, physicians and pharmacists can configure alerts for consumers and also provide some white-labeling services for them. There is also an option to save and keep track prescriptions online for future reference, that way users don't have to worry about losing another prescription.

The service comes with some other helpful features like Blood Donor registration, using which members can register themselves as Blood Donors. This will help the hospitals and blood banks reach the members in case of an emergency requirement of blood. Another similar programme is the Organ Donor registration, through which members can register themselves as Organ Donors. Druxon engages with the right organizations to manage the organ donations systematically and legally. This system

Users can organise their medication on Druxon.com and get text message alerts reminding them of their medication or when to refill their medicine

Druxon
Adding Action to Care

Druxon My Druxon

About Druxon Features Pricing

Enroll for Druxon Today!
(Basic Membership is free)

Signup today and get 10 free SMS Alerts

Email ID (Provide a Valid Email Address for Verification)

Password (Case-sensitive, Alphanumeric & >6 Characters)

Re-enter Password (Same as Above, for Verification)

Full Name (First, Middle, Last)

Phone (Enter Valid India Mobile Phone No - 10 Digits)

Gender (Select a Valid Value)
 --Select Gender--

Date of Birth (Should be > 18 years of Age. dd-mm-yyyy)

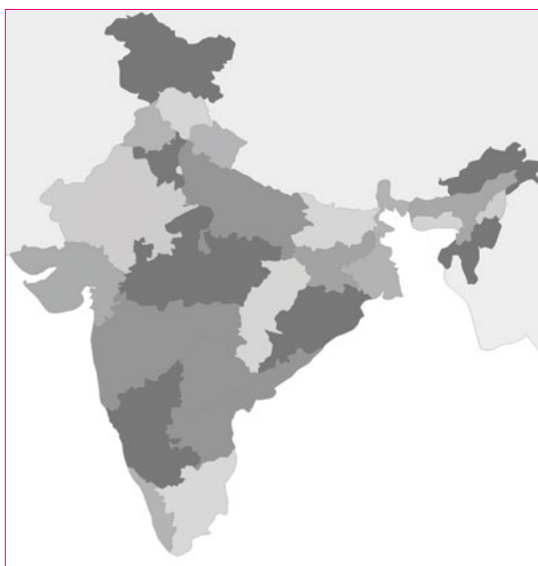
If you are a Physician or a Pharmacist, Enroll [Here](#)

works well for users and patients who require medicines according to a pre-determined schedule. The schedule can be monitored and managed by the user through the system.

Reach & Road Ahead

This system works well for users and patients who require medicines according to a predetermined schedule. The schedule can be monitored and managed by the user through the system. The introductory rate is Rs. 0.50 per alert. Once users register for an account for a small fee of Rs.100, they can enter their prescriptions on the portal and save them for their future reference. After this they can configure SMS alerts for various reminders. SMS reminders can be used to send alerts to take medicine at a particular time and on a particular day or to refill the required medicine. These reminders are charged from the user's account credit.

The service is also available for registered pharmacist and practicing physicians. Pharmacists can enroll with the service and become both individual members and pharmacist members. This allows them to operate as channel partners for SMS Alerts. Physicians can register with Druxon.com and become individual members plus Physician Members.



Mobiles for monitoring & tracking

FightBack

Organisation
Tech Mahindra

Project Location & Coverage Area
Pan India

Project URL
www.techmahindra.com/services/vas_services/consumer_based_utility_services/fightback.aspx

Area of intervention
Empowerment

Designed for women safety

Crime against women is increasing and the victims are unable to reach out to the masses for help. FightBack, an initiative of Tech Mahindra, is a mobile based application that is specifically designed for women safety. The FightBack app allows the user to press on a panic button whenever she feels unsafe. It tracks her location using GPS and alerts chosen contacts, security agencies and nearby police station about the location map.

The app is available on Android and Blackberry platforms. Based on captured data over the period of time, the mobile app also analyses alert data and highlights the unsafe places, so that women can check unsafe locations. These accessory items are embedded with a GSM-based chip that can track the user's location and send SOS messages to selected contacts in case of an emergency. FightBack uses GPS, SMS, location maps, GPRS, email and your Facebook account to inform your loved ones in case you are in danger.

The application requires Valid SIM and working GPRS connection. Any user can sign up for an account at fightbackmobile.com and login to their account. After Sign-in for downloading application, MY DASHBOARD page will be displayed, now click on 'Download Mobile App' button. At the time of signing up, the user can give the mobile number and email address of five contacts, to whom the alert message will be delivered at the time of danger.

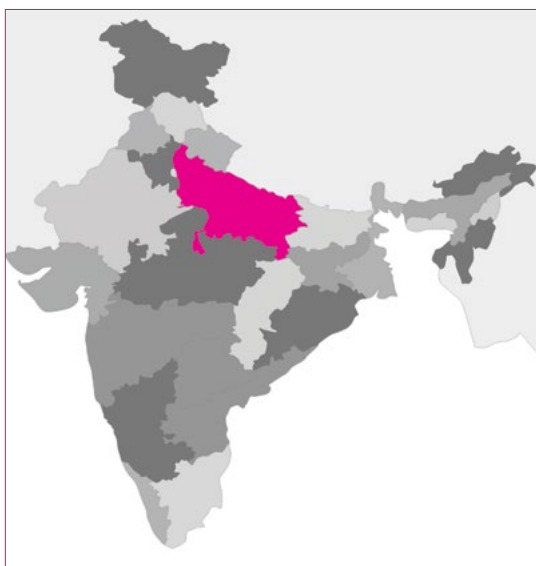
Based on captured data over the period of time, the mobile app also analyses alert data and highlights the unsafe places, so that women can check unsafe locations



Reach & Road Ahead

Tech Mahindra is currently bearing the cost of this initiative, which comes to roughly \$70 for each device. Fightback is associated with many NGOs those are working for Women and Child welfare activities and the solution is being offered to public through various platforms. The solution is being offered to various corporate employees like Microsoft Hyderabad and Qualcomm Hyderabad.

This application is now available for downloading on the company website for free & is available only for Indian mobile numbers. It tracks the location using GPS and alerts chosen contacts about the location map. The solution is being accessed by 22 states of India and its growing exponentially.



Mobiles for monitoring & tracking

mSwaasth

Organisation
Spatial Ideas

Project Location & Coverage Area
Uttar Pradesh

Project URL
www.spatialideas.com

Area of intervention
Health

A mobile based health management solution

Established in 2008, Spatial Ideas is a Mumbai based for-profit social enterprise that seeks to offer e-governance tools to enable transparency, accountability, efficiency and cost savings in the delivery of important citizen services including healthcare, food security, infrastructure and sanitation. So far, it has developed four products, one of which is mSwaasth which was first piloted in 2013.

mSwaasth is a mobile based health management solution. Smart tablets are given to ANMs pre-loaded with the application. The ANMs use the tablets to survey families and collect data on mother welfare, child welfare, family details and contraception details. The data is then collated and enables generation of real time location based reports for better tracking and monitoring of health interventions by district health care officials to ensure pregnancy guidance, prevention of female foeticide, family planning, timely vaccinations and better administration of drugs and management of drug stocks. The ANMs also helps families to benefit from government health initiatives.

mSwaasth maps disease and patient care and allows timely intervention by district health care officials by training ANMs to use the application. The project has been devised to monitor and ensure accountability and transparency on the part of the centres and to provide information to help people get quality and timely assistance.

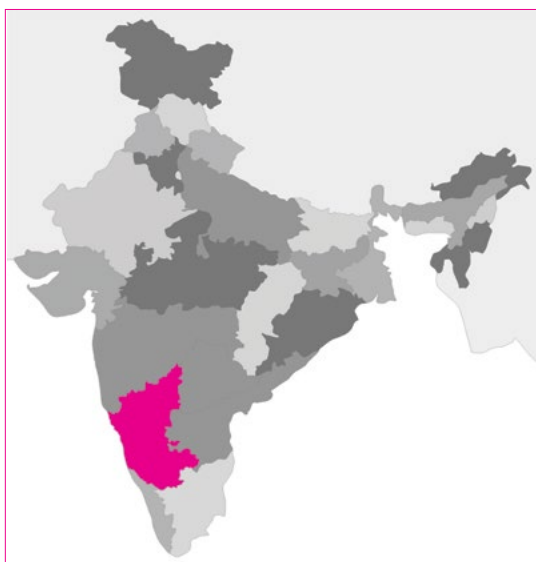
The ANMs use the tablets to survey families and collect data on mother welfare, child welfare, family details and contraception details



Reach & Road Ahead

Spatial Ideas have already partnered with the Aurangabad district administration for this pilot programme. The project was initially piloted at two primary health centres in Gadana and Aland villages in Aurangabad district of Maharashtra in 2013. Later it was implemented in 21 more health centres in 2014. The district administration has sanctioned INR 2.5 million from the District Planning and Development Council (DPDC) funds to implement the project in all 50 primary health centres in the district. The pilot project has already helped almost 5,000 patients.

Attendance of ANMs and efficiency of doctors have improved by 35 per cent. ANMs equipped with education based tools now spend 50 per cent more time with patients leading to improvement in consistency and continuity of patient care through well maintained medical records that builds rapport between medical staff and patients. So far the project has benefited more than 30,000 people.



Mobiles for monitoring & tracking

Arogyashreni

Organisation

Grassroots Research and Advocacy Movement

Project Location & Coverage Area

Mysore District, Karnataka

Project URL

www.graam.org.in/arogyashreni-technology-enabled-community-governance-primary-health-centers

Area of intervention

Health

IVRS-based approach for monitoring PHCs

Village level Primary Health Centres (PHCs) are supposed to play a major role under the National Rural Health Mission (NRHM). However, lack of accurate and timely data about the work of PHCs hamper district level health administrators from effective tracking and monitoring of these PHCs and their extent in implementing various government health interventions.

To overcome this problem, Grassroots Research and Advocacy Movement (GRAAM) launched Arogyashreni in 2011. Arogyashreni is an ICT-enabled community based project across seven taluks (blocks) of Mysore district, Karnataka to drive community led change in the public health system.

Arogyashreni was devised with objectives of (1) making community-based monitoring operational; (2) developing a sense of ownership among community representatives about their PHCs; (3) bridging information gaps among community representatives to help them articulate local problems and begin to look for their solutions; (4) enhancing demand for health services through community engagement; and (5) building a low-cost technology based platform for rapid analysis and dissemination of information generated through community-based monitoring of health services.

The project uses a low cost IVRS technology to collect data from local communities about their local PHC. The responses generated by IVRS are validated by physical verification. Project members are part of the Planning and Monitoring Committee of PHCs set up under the NRHM. Every quarter

The project uses a low cost IVRS technology to collect data from local communities about their local PHC

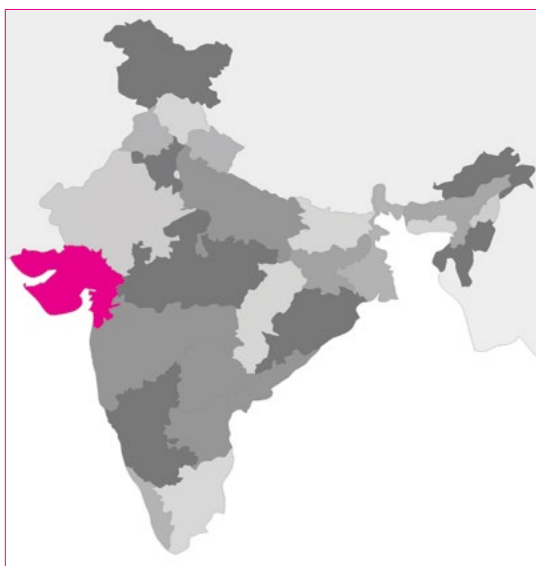


the project members use IVRS on their mobile phones and collect feedback from community locals about their PHC based on a set of 36 questions. Based on the data, the PHCs covered are scored on a score cards and ranked, allowing members to gauge performance and allow planning for further improvements addressing local needs.

Reach & Road Ahead

Arogyashreni now covers 112 PHCs across the seven Taluks of Mysore district and has 2240 participating community members of which more than 40 per cent are women. The use of this low cost mobile phone based technology has empowered the communities and has led to improved delivery of health services by all these 112 PHCs.

The project reached out to at least 565 community members who were part of the Planning and Monitoring Committees of the PHCs serving their villages. Out of these 233 were women. The project demonstrates the use of low-cost technology in minimizing data integrity issues, and enhancing community ownership over their own resources. Presently, the project is privately funded. The total cost of the project is INR 34,50,000 for one district in Karnataka having five to seven blocks and 100-120 PHCs. Presently, the project is funded by the Department of Health & Family Welfare, Govt of Karnataka.



Mobiles for monitoring & tracking

E-Mamta (Mother & Child Tracking System)

Organisation

NRHM, Government of Gujarat, India

Project Location & Coverage Area

Gujarat

Project URL

www.e-mamta.gujarat.gov.in

Area of intervention

Health

Tracking of pregnant mothers and children using mobile phones

Reduction of Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR) are important public health challenges for India. Tracking of pregnant mothers and children is a priority area for providing effective healthcare services which can have a large impact on reducing IMR and MMR. Towards this end, the Health and Family Welfare Department of the Government of Gujarat launched a Mother & Child Name Based Tracking Information management system called “E-Mamta” in collaboration with NIC, Gujarat in 2010. E-Mamta is a web based application <http://e-mamta.gujarat.gov.in> that is uniquely designed management tool being executed in Govt. health facility across Gujarat to accommodate for gaps in ensuring comprehensive maternal and child health services in rural as well urban areas.

The project aims at registering all pregnant and lactating women and children up to age group 0-6 years individually along with their full details to ensure them complete delivery of Ante-natal care (ANC), immunisation, IFAs, Institutional Child birth, Post-Natal Care (PNC) and awareness of nutrition and family planning.

The system also has SMS alert system in place for sending alerts to the beneficiaries for health checks prior to delivery. Apart from controlling and improving the health indicators in the state, other benefits are improved supply chain management of vaccines and drugs, focused deployment of personnel, improvement in the registration of births, better data capturing and analysis for preparation of block and district health action plans.

Registers all pregnant and lactating women and children up to age group 0-6 years and ensures them complete delivery of Ante-natal care (ANC), immunization, IFAs, Institutional Child birth, Post-Natal Care (PNC)

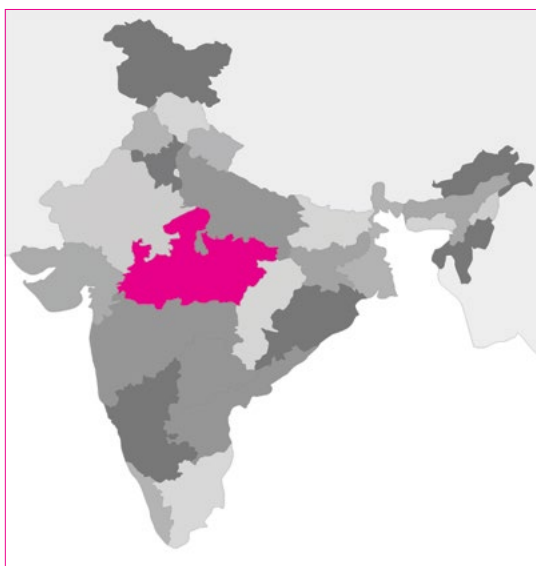


e-Mamta project has also partnered with 108 emergency services, so that mothers having Estimated Date of Delivery (EDD) in any given month can be able to contact 108 team and help them to prepare birth micro plan. Women are encouraged to use 108 services at the time of delivery.

Reach & Road Ahead

Every year nearly 13,00,000 pregnant women are registered under E-Mamta and get benefits of mobile phone services through E-mamta. Similar number of children are also registered and track up to one year and hence 13,00,000 children also benefit from these services every year.

The health details of about 85,00,000 families in the entire state comprising about 43 million individuals covering more than 80 per cent of the population have been entered so far in the software's database. System generated unique Health IDs have also been provided to all. The system has been instrumental in tracking and monitoring child and maternal health in the state. Presently, the project has been adopted by the state government and it has covered 1158 PHCs; 7274 Sub centers; 314 CHCs; 54 Sub-District & District Hospitals; six Major Hospitals and eight Corporations.



Mobiles for monitoring & tracking

Vatsalya Plus

Organisation

Mandla District Office

Project Location & Coverage Area

Mandla, Madhya Pradesh

Project URL

www.vatsalyamandla.org

Area of intervention

Health

Mobile based application for tracking child health

Vatsalya Plus is an initiative started by Collector Officer of Mandla district, Madhya Pradesh in 2011. It is an upgraded version of an earlier web-based system devised to deal with malnutrition, called Vatsalya. The project aims to improve child health monitoring process and facilitate school enrollment using information communication technology. The robust reporting and alerts mechanism ensures personalised attention to every child and reduces turnaround time (TAT) and paperwork.

Vatsalya Plus is a GPS enabled Tablet/Mobile Android based Application operating in both online/offline modes for data capturing and reporting. The project is based on Complete Loop Concept (Data capturing at source and feedback shared with source person) Vatsalya Mandla Project has a desktop application and a tablet based android application. Tablets installed with android applications are provided to all WCD Sector Supervisors (72) for monthly data capturing from source. Anganwadi workers are given Android phones and tablets and trained to use the system. After initial data capture, parents and children are identified and the children's growth is tracked.

These phones/tablets are linked with the web-based system that enables them to send personalised SMS to parents about malnutrition, geo-mapping of Anganwadis and GPS-tracked inspections. The system has an inbuilt dashboard system for data analysis and report generation, based on the key parameters of child health suggested by WHO, which are height, weight, MUAC (Mid-upper arm circumference measurement) of the child, and presence of oedema. Critical alerts are sent to the key officials by the system.

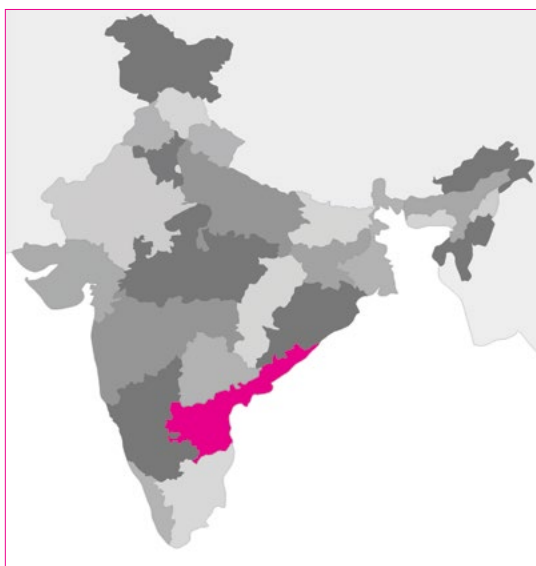
Phones/tablets are linked with the web-based system that enables them to send personalised SMS to parents about malnutrition, geo-mapping of Anganwadis and GPS-tracked inspections



Reach & Road Ahead

The Vatsalya's data can be viewed on the map to identify vulnerable areas to determine possible factors. The movement of supervisors can be tracked by date, time and geographical coordinates. Inspections are automatically geo-tagged, and areas which have not been visited get identified. Notifications are sent to respective anganwadis to visit the areas missed. The monthly malnutrition status report is automatically sent through email and SMS to all key officers.

More than 100,000 children are being maintained and monitored using the software. The system has eliminated paperwork and ensured effective and accurate data based tracking and monitoring to prevent malnutrition through timely intervention by district health officers. As of now, 25 trainings of DPO, CDPOs and sector supervisors have been conducted at district and block levels. A user manual is available in the application and hard copies of the same were also distributed during trainings. Out of 1821 Anganwadi centres, 1632 centres was examined by October 2014. Total 11, 36,000 INR has been spent for tablet purchase and operational cost of the project. The operational cost per tablet per month is Rs. 206 only.



Mobiles for monitoring & tracking

SMART Health India

Organisation

The George Institute for Global Health and the University of Oxford

Project Location & Coverage Area

Andhra Pradesh

Project URL

www.georgeinstitute.org.in/units/systematic-medical-appraisal-referral-and-treatment-smart-health

Area of intervention

Health

Smartphone-based medical referral and treatment

The George Institute for Global Health (TGIGH) launched the SMART Health project in 2011. It is a low-cost, high quality healthcare delivery system that enables both community health workers and doctors to provide state-of-the-art healthcare for common chronic diseases for a fraction of the price it would otherwise cost.

It utilises advanced mobile health technologies that provide frontline healthcare workers with a personalised clinical decision support system to guide the Systematic Medical Appraisal Referral and Treatment (SMART) to individual patients.

TGI developed the android-based system with the support of the Institute of Bio-Medical Engineering at Oxford University. SMART Health was initially developed with a focus on cardiovascular diseases (heart attack and stroke) as the core module. However it has the capability to address a much wider range of health issues, including diabetes, kidney disease, respiratory disease and tuberculosis. The app records wirelessly blood pressure, blood sugar levels and other risk factors of heart diseases like age, sex and smoking status, and analyses the data to indicate extent of cardiovascular disease (CVD) risk, based on which a person can consult a doctor for further treatment. The project trains ASHAs who are familiar with the neighbourhood and who go door to door to assess the medical condition of people using the app.

Based on the analysis and recommendations from the app, they refer patients to doctors or suggest precautionary measures. The app not

A low-cost, high quality smart phone-based system that provides front-line healthcare workers with a personalised clinical decision support system to guide the Systematic Medical Appraisal Referral and Treatment to individual patients

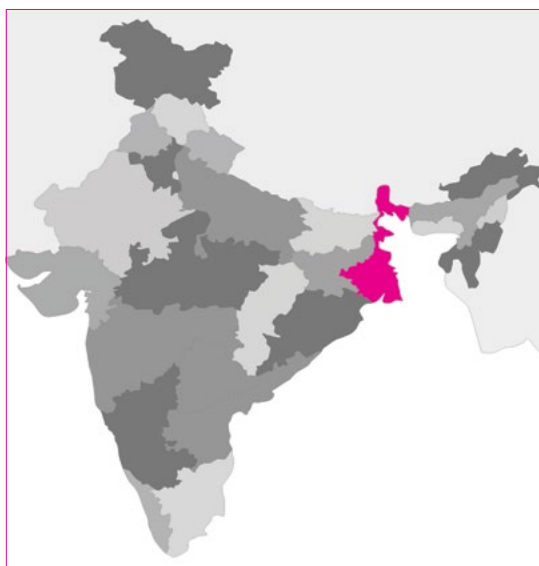


only alerts the person for CVD risk over a 10-year period, but also has a risk projection meter, which presents a visual portrayal of the CVD risk depending on change in values of risk factors over time.

Reach & Road Ahead

Initially, it was launched as pilot project in 11 villages of West Godavari district in rural Andhra Pradesh but since 2014 the project has been implemented across 55 villages of the district. The project has been funded by the National Health and Medical Research Council (NHMRC). The project also has the support of the Directorate of Public Health and Family Welfare of the Andhra Pradesh Government.

The project saves time of the available doctors. The basic screening protocol has been conducted by the health worker, the doctor does not have to record these basic heart health risks. The information from the app is automatically transmitted to a remote server and then to the doctor in the nearest primary health centre. If the app flashes a high risk sign, ASHA workers refer the patient to the doctor of the nearest primary health centre.



Mobiles for monitoring & tracking

GPower

Organisation

Child in Need Institute (CINI) & Accenture

Project Location & Coverage Area

West Bengal

Project URL

www.cini-india.org

Area of intervention

Empowerment

Real time health monitoring of adolescent girls

In India, adolescents (aged 10-19) and youth (aged 15-24) comprise 365 million, about 30 per cent of India’s population. Despite India’s commitments, current cohorts of youth are healthier and better educated than ever before, but vulnerabilities persist and evidence suggests that many young people are not making a healthy transition. In their everyday life, they face a wide range of vulnerabilities ranging from early school dropout to early marriage, early childbearing and violence.

GPower is a joint venture of Accenture and NGO CINI (Child in Need Institute). It is a tablet based application that allows frontline workers to track the vulnerabilities of adolescent girls by using 30 basic parameters in real time across four areas namely Education, Protection, Health and Nutrition [EPHN]. Also, it simplifying their access to the services offered by government flagship programmes in these areas in a uniform manner by developing linkages. These vulnerabilities include child marriage, child labour, child trafficking and school dropouts. GPower uses the cloud-based system to restore user data collected by trained community facilitators (CFs) from the ground. These tablets are equipped with the decision support system application that analyses the vulnerabilities of the girls and sends out reminders and alerts to the CF. The system concentrates on four areas: education, protection, health and nutrition, and enables the girls to have a successful transition from childhood to adulthood.

Reach & Road Ahead

In one year, the project has been implemented in 10 villages of Murshidabad district and 10 villages of South 24-Parganas district of

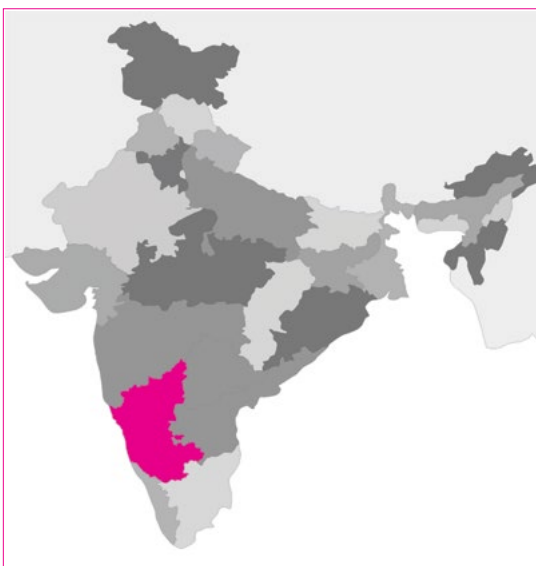
Tablet based application allowing frontline workers to track the vulnerabilities of adolescent girls in real time across four areas namely education, protection, health and nutrition



West Bengal. So far the project has identified 1018 girls as moderately vulnerable and follow up is going on while 298 girls have been identified as most vulnerable. Of these, 123 girls [41 per cent] have been saved till date. It has helped to prevent 13 child marriage cases in partnership with the community and CHILDLINE and has addressed two cases of missing child through CHILDLINE. It has mainstreamed 26 out-of-school girls in to formal schools while 70 girls have been enrolled in the Kanyashree Scheme, a West Bengal government scholarship scheme to continue education and prevent child marriage dropouts.

It is a low-cost system (Rs 600/child/year) and is currently being supported by the state government and community contributions, and uses existing government infrastructure such as ASHAs, Anganwadi workers and local clubs.

The project plans to cover 64,000 adolescent girls across 360 villages of six districts by 2017-18. CINI is trying to scale up the project with the support of the state government through the centrally sponsored SABLA and ICPS schemes.



Mobiles for monitoring & tracking

Handsheld for Health

Organisation

Handheld Solutions & Research Labs

Project Location & Coverage Area

Karnataka

Project URL

www.handsrel.com

Area of intervention

Health

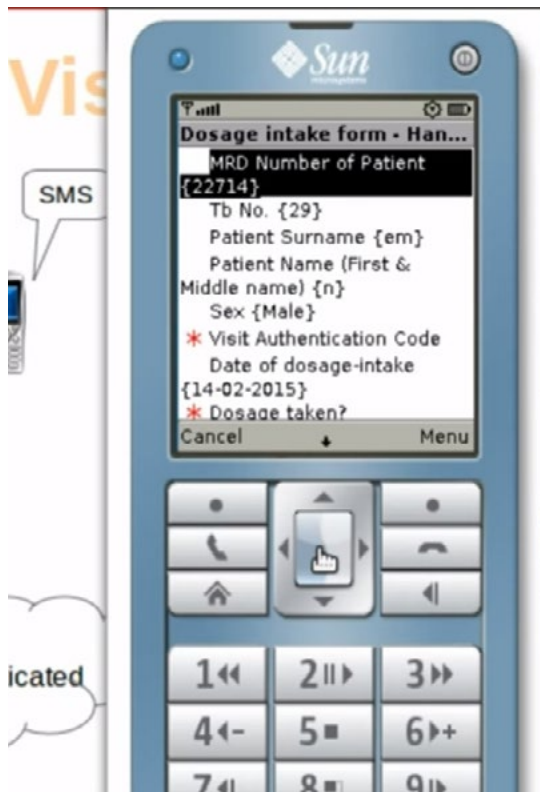
Empowering health workers with cloud based infrastructure

Handsheld, an initiative of Handheld Solutions & Research Labs (HANDSREL) is a mobile based solution to deliver end-to-end application and services on cloud based infrastructure. It is a complete platform-independent solution for electronic data collection (EDC) which can seamlessly integrate with other applications that need mobile data collection capability. This data collection solution mCollect also includes mForm and the platform can be used in low-cost Java enabled mobile phones for all kinds of electronic data collection.

In 2014, the company's founders Dr. Shashank Garg and Dr. Isha Garg launched a social enterprise called Handhelds for Health. The company has developed for monitoring outbreaks of communicable diseases and develop an open source disease surveillance system.

The main objective of Handhelds for Health is to empower the field health workers with appropriate tools like handheld mobile devices to collect, validate, and transmit data to a centralized server. The server will be accessible to resident experts, who can use the real-time data to rapidly identify disease trends and make informed public health decisions. Supervisors verify data at multiple levels within the mCollect application. Handhelds for Health will also be able to track non-communicable diseases, such as diabetes, that require continual medical attention and follow-up. SMS alerts are sent to the data collectors to notify errors.

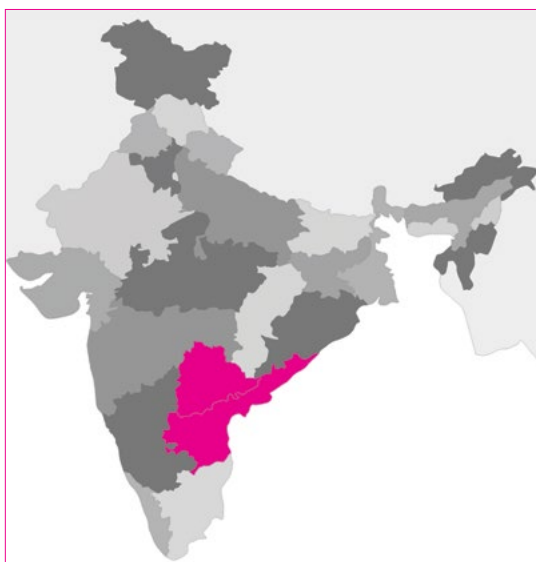
Real-time data to rapidly identify disease trends and make informed public health decisions



Reach & Road Ahead

The organisation is further hoping to use the solution to collect and transmit the data required for large, community-based, longitudinal studies of diseases and other health issues. The company has recently released a new product called 'Form Factor' which will allow anyone to sign up, design and host their forms on the company's servers and collect their data on their mobile phones for free.

National Institute of Smart Government (NISG) used Handsrel's mCollect electronic data collection platform to determine the effectiveness of electronic data capture in large scale e-Government projects. After the success of the pilot, the Indian Government used the application for monitoring minor irrigation schemes. It collected data from 10 districts and 240 villages of Rajasthan.



Mobiles for monitoring & tracking

Students Health Information Tracking System

Organisation

(SWHITS) for Andhra Pradesh Social Welfare Residential Educational Institutions Society

Project Location & Coverage Area

Hyderabad, Andhra Pradesh

Project URL

www.swhits.cgg.gov.in

Area of intervention

Education

Simplifying health monitoring of students

Andhra Pradesh Social Welfare Residential Educational Institutions Society (APSWREIS) has 353 residential, educational institutions with total student strength of 1,540,00, funded by the State Government and administered by an IAS officer. The society is required to monitor the health information of the students on a daily basis, especially the outgoing students like S.S.C. students, final inter and final year degree students.

Students Health Information Tracking System (SWHITS) is a mobile driven application developed by Hyderabad-based Centre for Good Governance to monitor the health information of the students on a daily basis. Under the system, the Principals/Medical Officers of the residential schools which are often located in remote areas send daily status of the general health of children (including cases requiring minimum treatment) as an SMS to the centralized office. A simple software (J2ME application) using templates to furnish these basic details has been installed in the mobile phones of the school authorities to simplify the process of sending the SMS.

Based on this information, MIS reports are developed in various formats including tabular, graphical charts and Google maps. The administrator is alerted with a blinking signal on the Google map when an institution reports more than 10 pupils suffering from a single category of disease. Another facility integrated in the application shows the direction on the Google map from an institution to the nearest Primary Health Centre (PHC).

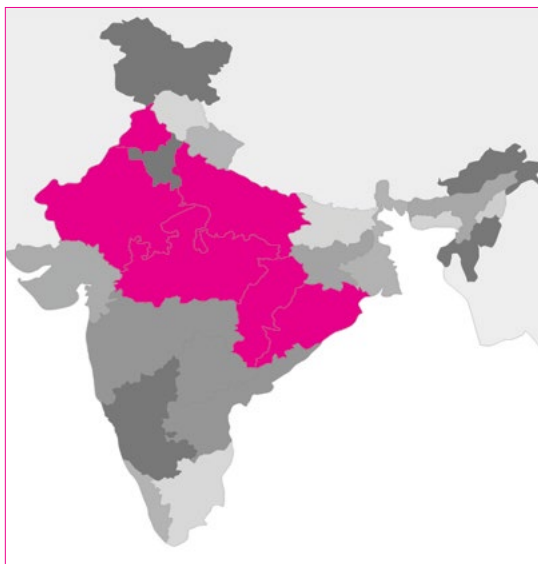
A mobile driven application to monitor the health information of the students on a daily basis



Reach & Road Ahead

This student health information tracking system helps in monitoring mechanism and reviewing of the hygiene. The same application can be extended to all such institutions, where the health monitoring in a residential system is very much needed. The innovation here is the use of widely accessed form of simple technology, in bridging the gap of information between the administration and the grass root level institutions.

By using this application, the concerned officers can monitor the health details and attendance of students on a regular basis. In addition, they can send email and SMS alerts to particular institutions to take appropriate measures. Till July 2014, the project has reported information about 353 institutions and about 1.5 lakh students. It has proved to be an innovative scheme in monitoring the health status of poor children from disadvantaged sections of the society enrolled in these residential schools.



Mobiles for monitoring & tracking

eCompliance

Organisation

Operation ASHA

Project Location & Coverage Area

Delhi, Chhattisgarh, Madhya Pradesh, Orissa, Punjab, Rajasthan, Uttar Pradesh

Project URL

www.opasha.org

Area of intervention

Health

Mobiles for tracking tuberculosis dosage

Founded in 2006, Operation ASHA (OpASHA) provides tuberculosis treatment and education services in 2,053 slums and villages in nine Indian states and two provinces in Cambodia.

As part of its larger project of identification and treatment of TB patients, OpASHA launched in 2013 is a mobile application eCompliance system which tracks every dose taken by every patient.

This is a necessity because of the tedious and difficult regimen prescribed under the DOTS therapy in which a TB patient must take up to 75 doses under observation. This is the therapy prescribed by WHO and followed across the world. eCompliance software is loaded on a seven inch tablet, which has a SIM card. This connects the tablet to a server through internet or text messages. The tablet updates the server every 20 minutes.

eCompliance tracks every activity required to deliver high quality TB treatment. It advises the health worker to carry out pre-treatment counselling. Simultaneously, the patient is also registered with her fingerprints in the eCompliance system. Then the first dose is dispensed. Thereafter, every time the patient has to take the medication, both the counsellor and the patient have to give their fingerprints simultaneously. This generates irrevocable evidence that the meeting took place, every time, and the medicine was taken under observation.

A mobile application eCompliance system which tracks every dose taken by each patient

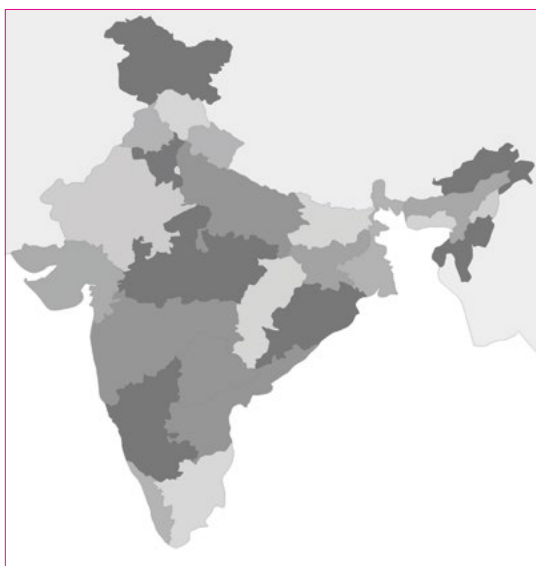


If a dose is missed, eCompliance issues an alert to the patient, health worker and his supervisor. The health worker has to meet the patient within 24-48 hours to provide further counselling and deliver the dose, ensuring that the patient re-joins the therapy. This meeting is also evidenced with a fingerprint. Thus, no fudging or manipulation can take place. This helps to achieve a very high adherence and treatment success rate.

Reach & Road Ahead

The eCompliance pilot project of OpASHA was launched in 17 different TB centers with 26 terminals in South Delhi slums and villages. Over 1,400 patients used biometric identification to verify over 60,000 visits and follow-ups. Over the period of a year, the default rate was reduced to nearly 1 per cent, much lower than the Revised National TB Programme's (RNTCP) 6-7 per cent. Presently, eCompliance has been rolled out for nearly 9000 TB patients so far in India, Cambodia, Uganda, Dominican Republic and Kenya. It has already recorded over 400,000 transactions. Nearly 185 eCompliance units are now functional.

The total cost of each eCompliance terminal is less than INR 20,000 and the cost per patient is INR 120.



Mobiles for monitoring & tracking

Clinic on the Go/vBond Vita

Organisation

Idea Brahma Consulting Pvt. Ltd.

Project Location & Coverage Area

PAN India

Project URL

www.ideabrahma.com/vbond-vita.html

Area of intervention

Health, Tracking and Monitoring

Mobile-based clinic management system

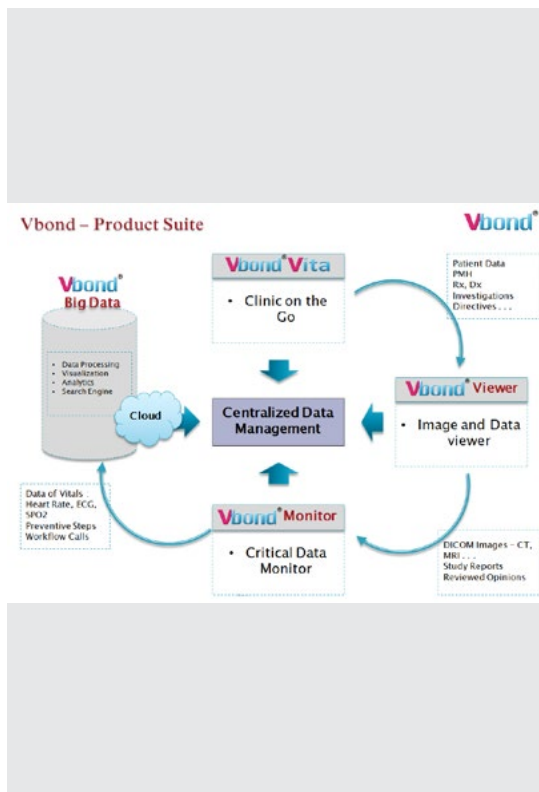
Set up in 2010, the Bengaluru-based Idea Brahma Consulting Pvt. Ltd. launched in 2013 is a mobile-based clinic management system with Vbond Vita for doctors to manage their clinics and practice on tablets, smart phones and web. With Vita, doctors can “Carry their Clinic” anytime, anywhere to manage patients, electronic medical records, e-prescriptions, referrals, appointments, lab management among others.

Vbond Vita has comprehensive features to manage customer relationships for hospitals, diagnostic centres and health and wellness centres. The solution is based on zero investment on IT infrastructure as it is a mobile phone application and compliments maintenance and Value Added Services for patients to improve loyalty and stickiness to the system.

The Vbond Vita clinic management system offers doctors an easy to use dashboard that is both simple and user friendly. It serves as the main portal to access various features. Any doctor can view his or her appointments for the day, check for any new updates on drugs etc., set their practice’s operating hours as well as recharge their credits. The application relays the diagnostic lab reports (e.g., MRI, PET, CET Scan, Digital X-ray ,etc) in the accepted standard diagnostic image quality, to the associated doctors having access to Tablets, Smart Phones.

The app also includes Vbond Monitor that helps health care professionals to remotely monitor any patient’s vital signs, analyse the patient’s health round the clock, set and monitor threshold alerts and initiate action proactively.

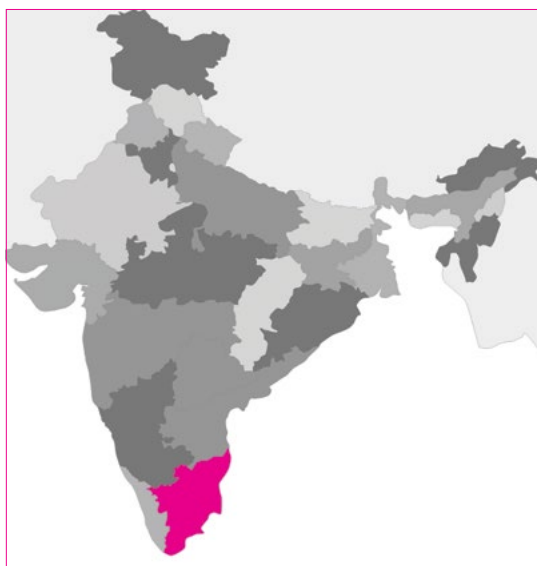
With Vita, doctors can “Carry their Clinic” anytime, anywhere to manage patients, electronic medical records, e-prescriptions, referrals, appointments, lab management among others



Reach & Road Ahead

Not only does the application solve the problem of providing health care in emergency cases, but also reduces the costs of publishing various reports and prescriptions. In developing countries like India, there are many unorganized clinics, poly clinics and small hospitals. Vbond Vita can be very helpful for medical practitioners. Since doctors are not much in the habit of carrying laptops, technology based on mobile phones is convenient for health professionals to serve the patients.

The mobile app enables these reports to reach the doctor in a record time of less than 30 seconds, even via normal GPRS connection. Within six months of launching Vbond Vita, almost 600 doctors are already using it. It receives over 100,000 unique registrations per month. The cost of vBond clinical management system is just INR 75,000. Idea Brahma has tied up with fitness clinic VLCC Healthcare Ltd for a mobile app that can track member management, fitness goals and bill payments.



Mobiles for monitoring & tracking

Tamil Nadu Health Watch

Organisation

Voxiva

Project Location & Coverage Area

Tamil Nadu

Project URL

www.voxiva.com

Area of intervention

Health

Phone and web based data collection system

The devastating tsunami which struck Southeast Asia in 2004 severely impacted Tamil Nadu. To contain and reduce escalating disease incidence during the post-tsunami relief effort, health officials needed a surveillance network that allowed them to easily access and analyze disease information in real-time.

Following the devastating 2004 tsunami, the US-based technology company Voxiva deployed a phone- and web-based data collection and disease surveillance system in India's hard-hit Tamil Nadu state. In May 2005, Tamil Nadu Health Watch was launched in the four worst devastated districts. Health Watch allows health workers, even in remote areas, to immediately report disease incidence data to health officials in real time. In turn, health managers can quickly analyze information about suspected cases, share technical information and resources, and initiate an informed response. The program also allowed health professionals in distant medical centers to quickly analyze and share information and resources, and to adequately respond to specific health-related questions.

By linking Primary Health centres with district experts and programme managers, activities can be coordinated more effectively and resources (e.g., supplies, technical personnel and transport) can be allocated more efficiently.

Reach & Road Ahead

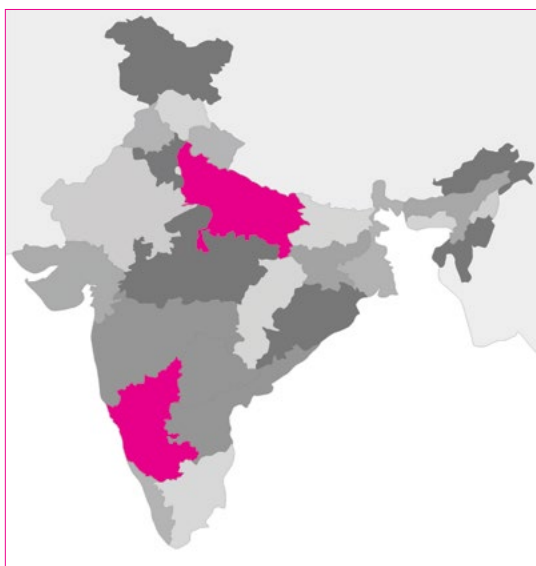
Voxiva trained more than 300 doctors from Primary Health Centres using simple, easy to use bilingual manuals and interactive sessions. The

Allowing health workers, even in remote areas, to immediately report disease incidence data to health officials



phone and Web-based system has already reduced incidences of disease, mitigating the potential spread within and beyond the borders of India. The training sessions were coordinated with the State to reinforce disease surveillance guidelines and outbreak response protocols.

The phone and web-based data collection system strengthens Tamil Nadu's disease surveillance capabilities at the district and sub-district levels. The solution maximizes the use of the existing communications infrastructure – mobile phones, fixed line and the Internet - making it a cost-effective and sustainable solution.



Mobiles for monitoring & tracking

Managing public-health supply chains using mobile phones

Organisation

Logistimo India Pvt. Ltd.

Project Location & Coverage Area

Uttar Pradesh, Karnataka

Project URL

www.logistimo.com/products

Area of intervention

Health

A mobile app to track health supply chains at PHCs

To address this problem, Bengaluru-based for-profit Logistimo India Private Limited launched in July 2012 is an application using mobile phones and web technology to ensure availability and quality of vaccines and medicines in Primary Healthcare Centers (PHCs) in villages.

The project involves providing village-level pharmacists and health workers with a mobile application that enables them to get a real time visibility of all inventories and orders. The app is compatible with all android devices and has the facility where any agent within the supply chain can be alerted via email or SMS. The app makes inventory as well as order management very easy and also reduces costs.

The solutions enable supervisors and district health officials to effectively monitor and manage health worker performance and stock availability across their districts, using these mobile applications and web browsers. Further, health workers can connect with each other via social networking on mobiles and can leverage this platform for solving problems quickly, sharing best practices and hence improving the quality of service.

The basic language of the application is English and it is free for download. Based on cloud technology coupled with support from mobile phones Logistimo enables a supply chain management. The app aims at ensuring optimal availability and quality of essential goods like vaccines, drugs, agriculture inputs, energy products at the last mile.

Using mobile phones and web technology to ensure availability and quality of vaccines and medicines in primary healthcare centres

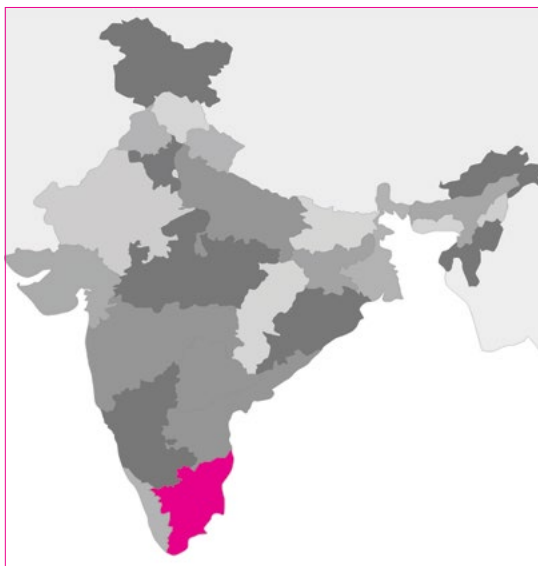


Reach & Road Ahead

Logistimo is fully functional in six Indian states and two African countries. Although the app is just catching up with a minimum of 100-500 installations, it has an average user rating of 5.0.

The project was initially deployed in 29 PHCs run by Karuna Trust in Karnataka. It is now being used across 300+ health facilities across two districts of Chamarajanagar and Shimoga. In March 2014, the Logistimo app was deployed in two districts of Uttar Pradesh (Bareilly and Shahjahanpur) in partnership with Immunization and Technical Support Unit, Ministry of Health and Family Welfare, Government of India.

So far, there have been over 2,50,000 transactions and events triggered through the platform, and user adoption continues to grow and improve. Across the total sites and roughly 150 health commodities, responsiveness to bottlenecks have improved more than 10-fold and vaccine availability hovers around 94 per cent.



Mobiles for monitoring & tracking

Mobile based risk assessment and management of Cardio Vascular Diseases (CVDs)

Organisation

SughaVazhvu Healthcare, IKP Centre for Technologies in Public Health (ICTPH)

Project Location & Coverage Area

Tamil Nadu

Project URL

www.sughavazhvu.co.in/impact.html

Area of intervention

Health

Assessing chronic diseases through mobile centres

Operating out of Thanjavur, Tamil Nadu, SughaVazhvu Healthcare is a not-for-profit rural primary healthcare organisation. It implements a model of primary health care developed by IKP Centre for Technologies in Public Health (ICTPH), a not-for-profit research organisation.

SughaVazhvu Healthcare has developed a Health Management Information System (HMIS), which is a cloud-hosted application, built on an open source platform. Located in Tanjore District, Tamil Nadu, SughaVazhvu comprises of doctors, nurses and field coordinators who work as a team for making access to healthcare a reality for rural populations. The application has both web based and mobile based versions to enter the data of patients.

The web version is used at the clinics accessed over laptops by physicians, while the mobile version is used in the field by community health workers and accessed over low cost android phones. During the enrolment exercise where the entire catchment population demographics are recorded at the household level, down to the GPS co-ordinates through a mobile based intervention, the HMIS is instrumental. The enrolled population is issued bar-coded identity cards and these form the seed database for the clinic. Additional modules built within the HMIS are used to document patient visits, maintain diagnostic information, schedule follow-ups and help in disease management. Other than capturing a detailed history of patient-physician interaction, HMIS has fully functional units for inventory and supply chain management, human resource management, inclusive of training and integration with android based mobile platforms for data integrations.

Carrying out risk screening for chronic diseases and ensuring preventive and curative management of these diseases

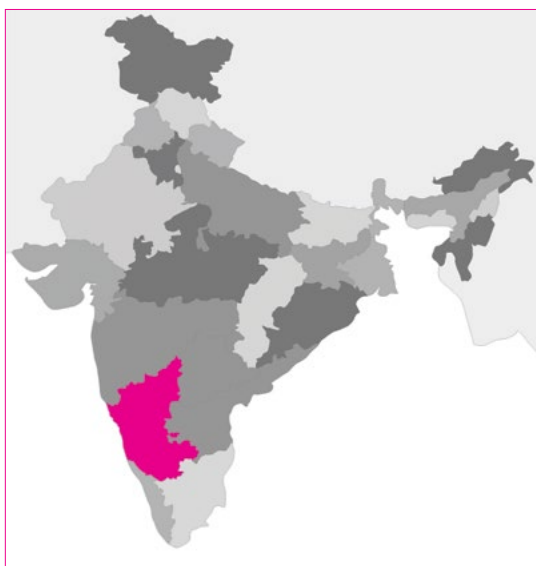


Modules such as monitoring and evaluation, clinical audit, clinical data analysis and community disease mapping aided by geo-visualisation have also been developed. Hand-held android phones are deployed within the community to aid in screening interventions for different diseases like Cardio Vascular Diseases, conducting socio economic surveys and for enrollment activities. Mobiles are given to the field level functionaries for patient data collection, which empowers them to function better and with more accuracy.

Reach & Road Ahead

As a result, there have been over 50,000 patient footfalls; almost 2,000 women have been screened for cervical cancer. The service has touched over 10,000 lives through school programmes and screened over 6,000 adults for cardiovascular risk factors using android phones.

The programme was started with a flagship partnership with UPenn, School of Nursing. It holds the potential of training 7,00,000 India medicine providers to competently provide first-line primary care in the rural India. The teams were successful in delivering healthcare services to 6,003 patients through various channels such as Community and Vision Camps, school based Anaemia Screening and household rapid risk assessments. Theme-based days are also organized regularly for the patients.



Mobiles for monitoring & tracking

Dristhi (Development and Impact Assessment of a mHealth Package for Rural India)

Organisation

Dristhi (Development and Impact Assessment of a mHealth Package for Rural India)

Project Location & Coverage Area

Karnataka

Project URL

www.play.google.com/store/apps/details?id=org.ei.drishti&hl=en

Area of intervention

Health

Tracking infant and maternal health in rural India

The Wellcome Trust has funded the development of a mobile healthcare app called 'DRISTHI (Development and Impact Assessment of mHealth Package for Rural India)' to help track maternal and infant health in rural India. The project is being implemented by a consortium led by Foundation for Research in Health Systems (FRHS) and including the Department of Reproductive Health and Research, World Health Organisation (WHO), and Earth Institute, Columbia University.

The DRISTHI mobile application enables ANMs and district health officials to track and monitor family planning services, antenatal and postnatal care and immunization of women and children in the rural areas. Paper based systems used by ANMs have proved to be slow, inaccessible and wasteful. The mobile Android application, DRISTHI replicates the paper-based record system. It is a custom app for Android tablets that provide multimedia content, cloud-synced reports, decision-making, alerts and scheduling.

The ANMs use the app on tablets to record which infants were receiving their vaccinations and whether they had received their full courses. Data collected by ANMs via digital forms loaded on tablets is used to assist existing service provision through a suite of mHealth tools on tablets. These range from using multi-media content to strengthen counseling for contraceptive choice for couples of reproductive age; to the use of reminder messages to clients to increase timely ANC for pregnant women. Alerts for providers are also sent to increase timely ANC for pregnant women, and improve coverage rates of vaccinations for children. The app

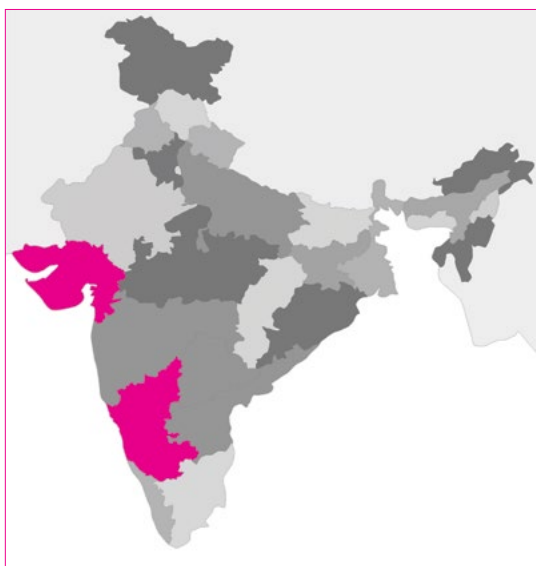
A custom app for Android tablets that provides multimedia content, cloud-synced reports, decision-making, alerts and scheduling



also helps to ensure that mothers and infants receive all their necessary vaccinations, iron supplementation and medical checkups by using alerts and automated reporting.

Reach & Road Ahead

The project is now being piloted in Karnataka and covers a population of more than 10,000. The mobile phone application DRISTHI (Drudgery free Reliable Information Service Towards Health Impact) supports NRHM's reproductive, maternal and child health (RMCH) services. The technology is easy to use, provided free of charge, and has been developed with the intention of immense scale-up, following rigorous pilot testing, impact assessment and revision. This project is funded by the Wellcome Trust's Affordable Healthcare in India initiative, which supports translational research projects to deliver safe and effective healthcare products for India at an affordable cost.



Mobiles for monitoring & tracking

m-CHECK Programme

Organisation

Foundation for Research in Health Systems (FRHS)

Project Location & Coverage Area

Karnataka & Gujarat

Project URL

www.frhsindia.org

Area of intervention

Health

Mobiles for mother and child health

World Health Organization (WHO) developed the Mother/Baby seven day mCheck programme for WHO patients for their Patient Safety Champions, a network of patients from around the globe who are committed to improving patient safety by empowering patients. The main objective of the programme is to help mothers and their family members in identifying danger signs in a woman who has recently given birth or her newborn baby and encouraging the mother or her family to seek appropriate care.

The mCheck intervention educated mothers using paper tools, video films, and reminder voice messages. The paper checklist was complemented by a mobile phone birth registration and a voice message reminder system in order to facilitate both the delivery of the tool and use of the tool after delivery. Automated reminder voice messages were sent to mothers on their mobile phone during the first seven days of delivery.

Upon identifying any of these danger signs in either herself or her baby, the tool can help a mother make an informed decision about the severity and urgency of the problem and when to access skilled care. Each day message had one mother and one baby danger sign advising mother to refer to the paper tool given in the hospital and on identifying any of the danger signs, seek medical care immediately. After 7-21 days of getting discharged from the hospital, mothers' knowledge was assessed.

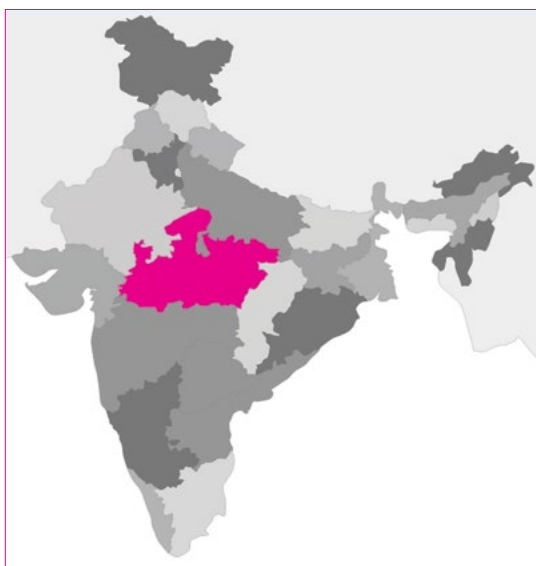
Helping mothers and their family members in identifying danger signs in a woman who has recently given birth or her newborn baby and encouraging the mother or her family to seek appropriate care



Reach & Road Ahead

FRHS and WHO with the funding support of Bill and Melinda Gates foundation conducted a study in Mysore district of Karnataka from April-October 2013 to assess the impact of mCheck intervention on educating mothers on danger signs in order to improve their health seeking behaviour. FGD was conducted with 20 mothers and their opinion/feedback was taken into consideration for framing the mCheck voice messages and pictures. The study was conducted in three government health facilities. The study measured the improvements in mother's knowledge of danger signs, ability to identify complications and their health seeking behaviour as a result of the program interventions. Comparison was made between the knowledge of two groups of mothers, those who did not undergo the mCheck program interventions and those who went through the mCheck intervention.

The tool recognised evidence-based danger signs for a mother and her baby in the first seven days after birth to trigger questions that a mother can ask herself during this period. The tool was designed to promote appropriate and timely health-seeking behaviour and ultimately reduce maternal and neonatal morbidity and mortality. Mothers were able to use the tool as a trigger to call an interactive automated system in their local language that further guided their decision-making process regarding skilled care.



Mobiles for monitoring & tracking

GIS@School

Organisation

School Education Department, GoMP and National Informatics Center (NIC)

Project Location & Coverage Area

Madhya Pradesh

Project URL

www.educationportal.mp.gov.in/GIS

Area of intervention

Education

Mobile application ensuring RTE in Madhya Pradesh

Madhya Pradesh is the second largest state in the country having more than 1.60 crore students and 1.25 lakh schools located in the remotest regions of the state. However, maintaining and monitoring school infrastructure as per Right to Education (RTE) norm was a challenge for the State Education Department.

To address this challenge, School Education Department, GoMP and National Informatics Center (NIC) initiated GIS@School. The project is expected to help various stakeholders in effective planning and policy making, identification of target habitations for opening of new schools, demand of additional classrooms as per the enrolment, toilets etc. in a rule based manner. GIS@School uses simple feature mobile phones to capture authentic and complete information. This information is synced to the web platform to strengthen the stakeholders in achieving the goals in a transparent and effective manner.

The mobile application captures geocoordinates of the schools and is required to create a GIS layer of schools. The app also allows capturing of the geotagged photographs and attribute information on various mandatory facilities/infrastructure, i.e. school building, classrooms, boys' toilet, girls' toilet, head master room, ramp for barrier free access, kitchen shed for midday meal, boundary wall, playground).

The app functions in offline mode and synchronises with the online system when it comes in network zone. The GIS platform and GPS enabled information (photographs of the facilities) is used for the generation of

Helping various stakeholders in effective planning and policy making, identification of target habitations for opening of new schools, demand of additional classrooms as per the enrolment, toilets etc. in a rule based manner

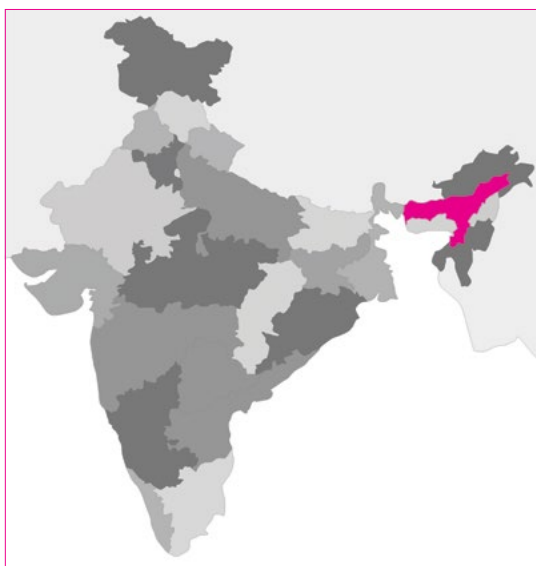


status report on compliance of RTE norms in the school. The System ensures and identify Schools for their RTE Compliance and providing system for Administrative officers for taking remedial actions for the schools which are non compliant with RTE Norms.

Reach & Road Ahead

The system has mapped over 1,25,000 schools with over 13,00,000 geo-tagged photographs for various facilities and infrastructure of the schools. The system also ensures the availability and demand of the facility can be calculated automatically, minimising the efforts and time required with the manual system.

The system uses crowd sourcing, thus engaging citizen/staff in decision making. To make it sustainable, project members used their own android based smartphone and worked on the concept of BYOD (Bring your own device) which helped in fast execution. Further the system is also expected to help in rationalization and relocation of the schools in a rule based manner without any political or any other interference.



Mobiles for monitoring & tracking

End MM Now

Organisations

Nazdeek, PAIHRA, & ICAAD

Project Location & Coverage Area

Assam

Project URL

www.endmmnow.org

Area of intervention

Health

Combating maternal deaths

Ninety per cent of maternal deaths are preventable. India leads the world with the highest number of maternal deaths, and Assam leads the country with the highest maternal mortality ratio, 390 deaths for 1,00,000 live births against the national ratio of 212. Tea garden workers, many of them belong to the indigenous 'Adivasi' community suffer the highest maternal mortality rate in India and abysmal rates of infant mortality. The lack of data on the Adivasi community makes it particularly difficult to address some of the gaps in the implementation of maternal and infant health policies.

For this reason, Nazdeek, PAIHRA (Promotion, and Advancement of Justice, Harmony and Human Rights of Adivasi) and ICAAD (International Center for Advocates against Discrimination) have developed an innovative project, Project 'End Maternal Mortality Now' (End MM Now), that uses SMS based technology tools such as those offered by FrontlineSMS and Ushahidi and website to provide the Government with key data on the gaps in the delivery of maternal health services, increasing community awareness and monitoring of existing facilities and services, and ensuring access to remedies for victims of health rights violations. The Ushahidi platform allows for mapping of the reports received. After a verification process conducted by phone or through field fact-finding the reliability of the reports are assessed.

The platform also allows for categorization of reports by issue and geographic area. The data collected through the project is analysed and submitted to the authorities at District and State level, who can utilize it to plan the allocation of resources more effectively. Additionally, the data can

Using SMS based technology to provide the government with key data on the gaps in the delivery of maternal health services, increasing community awareness and monitoring of existing facilities and services, and ensuring access to remedies for victims of health rights violations



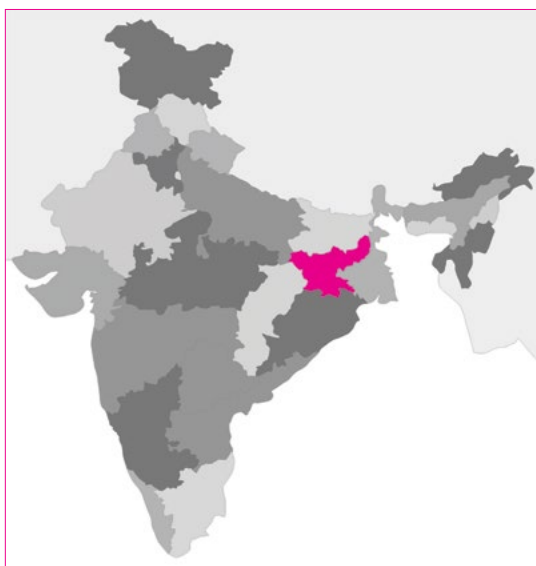
also be used for litigation, namely to develop public interest cases which guarantee concrete reliefs for women, strengthens health infrastructure, and redress structural discrimination while avoiding overburden of the judicial system.

Reach & Road Ahead

The Project trained a group of 40 women volunteers living in Balipara and Dhekiajuli Blocks in the Sonitpur District of Assam to identify and report cases of health violations in their communities through SMS. Through the Project, 40 women volunteers have reported almost 70 cases of violations between May and November 2014 in tea gardens and rural areas in Sonitpur District. Reports sent through codified SMSs are mapped on an online platform and database and made publicly available at the End MM Now Project website.

During this process, volunteers have developed leadership skills within their communities, continue raising awareness of women living in rural areas about maternal and infant health services, and are monitoring the provision of health services at village level.

For instance, volunteers found better hygienic conditions in primary health centers, more availability of ambulances, and timely registration of pregnancies (as per Government schemes). Finally, volunteers have reported that due to the monitoring and reporting mechanism put in place, local health staff, especially village level health workers (ASHA) perform their duties timely and more efficiently.



Mobiles for monitoring & tracking

Mobile 4 Mother

Organisation
NEEDS

Project Location & Coverage Area
Deoghar District, Jharkhand

Project URL
www.mobileformother.in

Area of intervention
Health

Monitoring pregnant women with mobile based application

Mobile for Mothers (M4M) is mobile based application that is developed by Digital Empowerment Foundation (DEF) in 2011 and is being implemented by NEEDS to reduce maternal mortality and morbidity by bringing changes in practice. M4M is designed as multimedia based software that runs on mobile phones. Working as an interpersonal communication tool for women during their antenatal care and prenatal care, it educates people on safe pregnancy behaviours.

It serves in the monitoring of services received and behavior changes of pregnant women during pregnancy and post pregnancy. Each Sahiyya is equipped with an inexpensive mobile phone running one mobile based software that contains registration forms, checklists, danger sign monitoring, and educational prompts for pregnant women and women who have delivered. Data are transferred to the web-server through GPRS from Sahiyya's mobile.

The system generates monthly dash-board report on the basis of NRHM's 31 indicators and summary reports. These reports summarize each Sahiyya's recent activity and the overall status of their clients, including how many of their clients are overdue for visits or follow-ups on referrals. Reports can be viewed on the www.mobileformother.in website and SMSed on a daily or weekly basis.

The software itself helps to manage enrolment, support, and tracking of all of the CHW's clients and their activities. The low-literate user interface design requires a minimal amount of buttons to be pressed (in some cases

Mobile based software that contains registration forms, checklists, danger sign monitoring, and educational prompts for pregnant women and women who have delivered

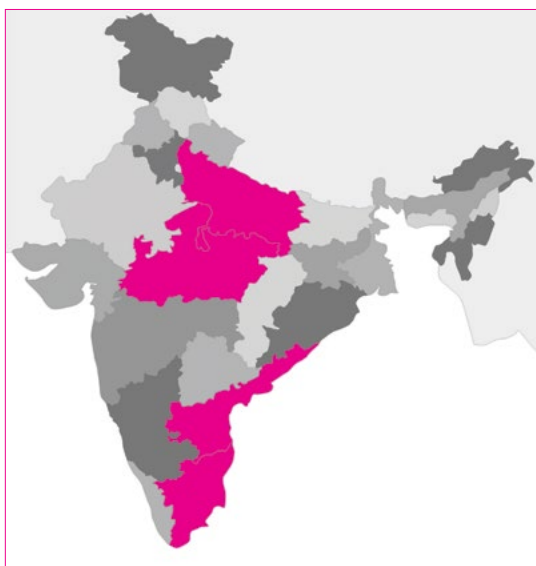


only two buttons, one to play audio and one to move to the next question). Additional forms and features like data entry and client management are accessible to those ASHAs/Sahiyas who are more technically capable. The project uses local languages to develop the content/audio messages which can be recorded in any other languages and can be linked to the application.

Reach & Road Ahead

Currently M4M Project is operational in Sarwan block & Sonaraitadi block in Deoghar district. The project works closely with ASHA, ANM and other Health workers. The project helps in creating reports that can be shared with government officials and also with ANMs in their monthly roaster meeting. The project aims to expand in Deogarh, Pakur and Sahibganj of Santhalpargana region in Jharkhand with at least 1,500 health workers, covering a rural population of around 1,50,000.

Local Government have included this model in the District Health Action Plan for 2014-15 in Deoghar & Pakur districts under innovation.



Mobiles for monitoring & tracking

Mobile Application for Anganwadis (MAA)

Organisation

National Informatics Centre (NIC)

Project Location & Coverage Area

Andhra Pradesh, Uttar Pradesh, Tamil Nadu, Madhya Pradesh

Project URL

www.hrd.ap.nic.in/maa

Area of intervention

Health

Using mobiles for data collection to reduce IMR and MMR

In India, there are currently about 1.8 million Anganwadi workers for delivering various services like referral services to pregnant women and mothers, providing supplementary nutrition to address malnutrition and pre-school education. With so many Anganwadi workers on the field, in geographically remote areas, it becomes difficult to monitor and track their functioning. In addition, the Anganwadi workers need to be empowered as they play a significant role in reducing IMR and MMR, and protecting child and mother health.

Mobile Application for Anganwadis (MAA) is a mobile based application developed by NIC Hyderabad to manage the information flow from Anganwadi workers to various levels of administration. MAA was designed to empower the Anganwadi workers in recording data, like supplementary nutrition beneficiary attendance, pre-school attendance of children, immunization details, data to monitor IMR and MMR, etc.

Using this MAA app, the performance of each Anganwadi worker can be tracked and monitored on a day to day basis. In addition, the problems faced by the Anganwadi workers can be communicated easily and timely redressal can be done. The project has improved the attendance of Anganwadi workers, owing to the transfer of data on their attendance. A reduction in IMR and MMR status and reduction in the number of malnourished children in Andhra Pradesh are also among several positive changes.

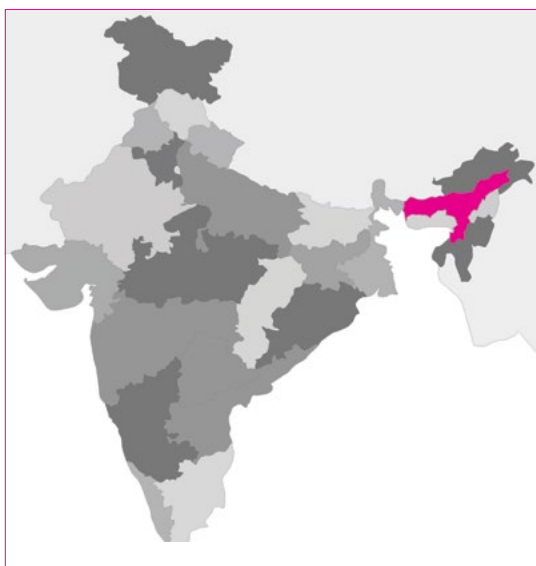
Empowering the anganwadi workers in recording data, like supplementary nutrition beneficiary attendance, pre-school attendance of children, immunisation details, data to monitor IMR and MMR, etc.



Reach & Road Ahead

The project was started in the year 2012 with 25 Anganwadi centres located in Shadnagar Mandal and was scaled up to 83,000 Anganwadis in the next three months. Currently, lakhs of messages (SMS) are generated through the system and real-time data is captured and assimilated for achieving the goals of reduction in IMR and MMR, and improving the status of malnourished children. This application and the entire system together have helped in eliminating food gaps and ensuring availability of food at Anganwadi centres to certain extent.

It has also improved the attendance of Anganwadi workers, owing to the transfer of data on their attendance. A reduction in IMR and MMR status and reduction in the number of malnourished children in Andhra Pradesh are also among the positive changes that the project has brought about. MAA is a sustainable solution because of very low capital expenditure and low overheads. Only a basic mobile phone at a minimal fixed monthly rental of mobile phone of about INR 30 per month is required for it to function.



Mobiles for monitoring & tracking

MoSQiT (Mobile based Surveillance Quest using IT)

Organisation
CDAC – Pune

Project Location & Coverage Area
Assam

Project URL
www.cdac.in/index.aspx?id=pk_pr_prs_rl214

Area of intervention
Health

Mobile based surveillance tool to track malaria prone areas

Malaria is a public health problem in India with 95 per cent population residing in malaria- endemic areas. Almost 80 per cent of malaria cases reported is confined to areas with 20 per cent population residing in tribal, hilly, difficult and inaccessible areas. Malaria is also responsible for about 40 per cent of public health expenditures and 30 per cent-50 per cent of inpatient hospital admissions.

MoSQiT was developed by the Knowledge Discovery and Analytics Group (KDAG) of C-DAC, Pune. MoSQiT is an advance mobile based surveillance tool for surveying Malaria prone areas in order to track and monitor the status of malaria prevalence in the community. Through real time surveillance by ASHA & other health workers, the tool enables decision makers to detect changes in trend, distribution of malaria in order to initiate investigative and control measures.

This data is then transferred to a laboratory for testing through e-mail or SMS. The lab technician then transfers the generated result back to the health worker using MoSQiT. This enables quick data analysis by the Indian Council of Medical Research for intervention programmes. The tool also serves as an official measure to gauge the effectiveness of anti-malaria programmes, thereby, making it highly effective for malaria prevention and control.

C-DAC has taken some basic precautionary steps; the first being that the mobile phone is locked and the ASHA worker is able to use it only for the purpose for which it has been given. MoSQiT acts effectively to reduce the

Serves as an official measure to gauge the effectiveness of anti-malaria programmes, thereby, making it highly effective for malaria prevention and control

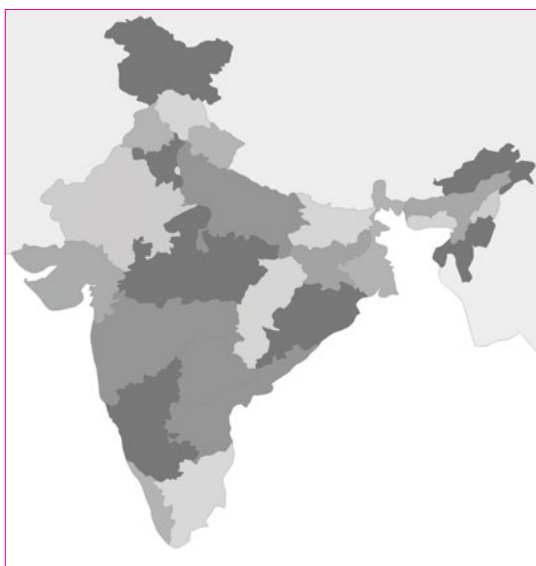


time-duration of providing treatment as the data reporting is carried out in real time by the local field worker without having to physically travel to the nearest health centre. Several of these problems are being currently addressed by MoSQIT through leveraging on mobile connectivity to predict, prepare for, and control Malaria epidemics thereby reducing the mortality rate.

Reach & Road Ahead

MoSQIT software has been deployed in collaboration with Regional Medical Research Centre (RMRC)/Indian Council of Medical Research, (ICMR) at Dibrugarh district of Assam, in the Tengakhat PHC. About 50 villages have been identified in the PHC, where 50 ASHA workers are equipped with a Mobile phone each for data collection, reaching out to a total population of 50,000 villagers. Given the poor connectivity in the region, an ASHA worker can send data by mobile phone service by general packet radio service (GPRS) if connectivity is good, short message service (SMS) if the connectivity is poor or manually.

The tool has proven to be very effective in malaria prevalent areas of Assam, and has been widely accepted by field workers for its versatility and ease of use. The encouraging response to our initiative has been augmented with this award which recognizes our efforts in creating tools and technologies for the benefit of the common man. The service is currently offered in English, because the paper-based model was in English.



Mobiles for monitoring & tracking

P-HMMS

Organisation

ArguSoft India Ltd, IL &FS Health Initiatives division, and the Global Fund

Project Location & Coverage Area

Pan India

Project URL

www.ilfsets.com

Area of intervention

Health

Mobile-based monitoring tool for pregnant women

PPTCT Health Management and Monitoring system (P-HMMS), an initiative of IL&FS is a mobile application that can be installed on a low cost mobile phone that was provided to every outreach worker (ORW). The mobile application provided the functions like enrolling new antenatal mothers, getting automatic work lists for the day/week (For example, HIV test due, Monthly ART visit due).

The P-HMMS application is a mobile app that can run out of any suitable java enabled mobile phone. The application provides facilities for the ORW and the PCO to capture data and provide information about all their tasks related to the PPTCT programme. As soon as an ORW identifies a positive client, she can register her in the system through the easy to use interface on the mobile phone. The data is then synchronized with the web server through mobile networks such as GPRS.

The server component of the P-HMMS system generates appropriate 'Reminders' and sends them to the mobile phone application. If an ORW registers a positive pregnant women into the system, the next step of getting the women to the ART centre is generated as an 'Reminder' and sent to the mobile application. The ORW can view this reminder so that she does not miss out on this inadvertently. She can simply click on the reminder to enter the details of the event such as an ART visit or PCR test for the baby.

The application takes care of providing reminders for every positive pregnant women for the entire intervention period, which starts from the

Counselling, testing and treating pregnant women who are HIV positive so that the transmission of virus to the child can be prevented

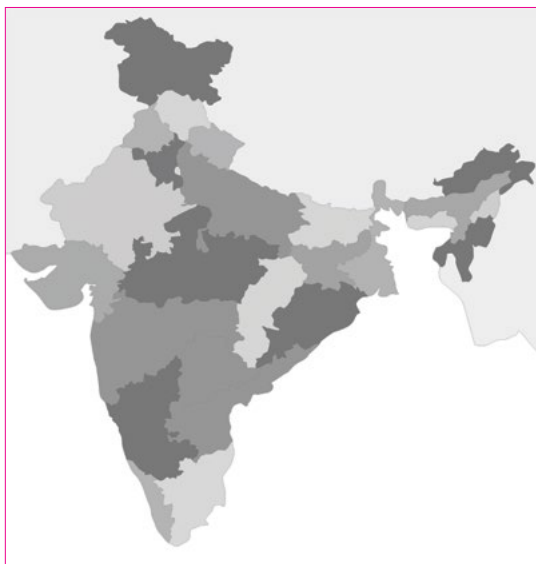


time they are identified, up to the time the baby is 18 months old after delivery.

The solution also has web-interface that can be accessed from any internet connected computer. In addition, of all reports required by all the stakeholders of the programme may be done. Closed User Groups were being established so that ORWs could now have face-to-face communication with the patient.

Reach & Road Ahead

After successful pilot in Chennai (Tamil Nadu), the P-HMMS application is been used by more than 2,500 ORW's in 26 states. 644 ORWs, District Project Coordinators and counselors were trained on the PHMMS in the year 2012. Manipur, Tamil Nadu, Gujarat, Puducherry and Kerala started reporting through this mobile based application in 2012. This mobile based real time monitoring and tracking system P-HMMS has been enabled for Nagaland, Mizoram, Assam, West Bengal, Odisha, Uttar Pradesh, Bihar Rajasthan, Mumbai, Delhi and Madhya Pradesh.



Mobiles for monitoring & tracking

Swasthya Slate

Organisation

Public Health foundation of India

Project Location & Coverage Area

Pan India

Project URL

www.swasthyaslate.org

Area of intervention

Health

Diagnostic tests on mobile devices

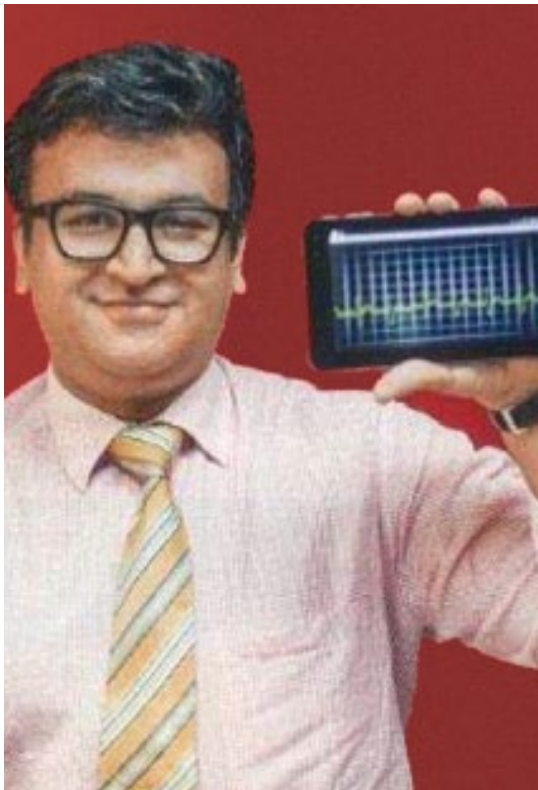
There is a gap witnessed in the health information system and diagnosis patients. The increased amount of administrative paper works and referral system reduced the efficiency of the health benefits.

Swasthya Slate is a bluetooth-enabled integrated diagnostic kit that allows Android Tablets and Phones to conduct 33 diagnostic tests on the mobile device. The Swasthya Slate includes specialised applications that help users perform a variety of screenings and health analysis protocols. It allows users to deliver fast and accurate care at home, in clinics and just about anywhere. It is an integrative device with data analytics and reporting for monitoring and planning. The system provides end to end integration from diagnosis, referrals, followups to reporting, health communication and healthy behaviour promotion.

It contains decision support tools to enable users to deliver quality recommendations for achieving better health. The slate stores electronic medical records both locally on the phone/tablet and also pushes the data onto the cloud. This allows offline/online operations and doctor on call services. The solution is designed to extend the existing telemedicine and HIMS systems to mobile technologies.

The system uses the mobile communications services to develop generic Body Area Network and a generic healthcare service platform for monitoring the following parameters: ECG, EMG, Pulse rate, Respiration Rate, Skin Temperature, Blood Flow, and Saturated Per centage of Oxygen. It is designed to be simple, effective and dependable. The new system

Specialised applications that help users perform a variety of screenings and health analysis protocols

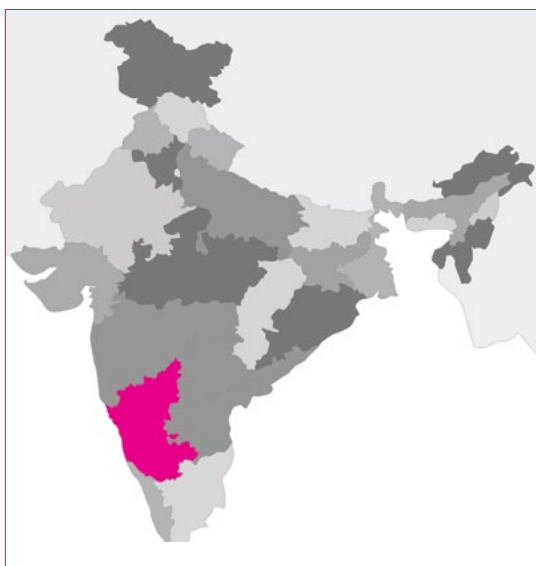


has integrated Blood Pressure, Blood Sugar, Heart Rate, ECG and Body Temperature units. The system also has a printer that allows for printout of the results immediately.

Reach & Road Ahead

After successful pilot in Chennai (Tamil Nadu), the P-HMMS application is been used by more than 2500 ORW's in 26 states. 644 ORWs, District Project Coordinators and counselors were trained on the PHMMS in the year 2012. Manipur, Tamil Nadu, Gujarat, Puducherry and Kerala started reporting through this mobile based application in 2012. This mobile based real time monitoring and tracking system P-HMMS has been enabled for Nagaland, Mizoram, Assam, West Bengal, Odisha, Uttar Pradesh, Bihar Rajasthan, Mumbai, Delhi and Madhya Pradesh.

The initiative enhanced the accountability of data as now it could be easily tracked, for example, which ORW punched in which case and what had been done about that case. Soon a system of SMS alerts was also developed to compliment the operations. The impact of PHMMS has been huge as it has given cost effective tool for preventing the transmission of an almost incurable disease.



Mobiles for monitoring & tracking

Peer Water Exchange

Organisation

Blue Planet Network

Project Location & Coverage Area

Karnataka

Project URL

www.peerwater.org/

Area of intervention

Water Sanitation

SMS interface to receive water & sanitation field reports

Around a billion people lack access to safe drinking water while 2.6 billion lack access to hygienic and dignified sanitation facilities. Progress against these global crises has been slow despite several decades of efforts. Many rural water and sanitation projects are plagued by inefficiencies and a majority of them do not meet the initial expectations of success.

The Peer Water Exchange (PWX) is an innovative global online network that empowers water groups to increase capacity and collaborative funding and initiatives, enforces collaboration and transparency through open peer review, creates a global clearing house for all water transactions; and leverages this information to increase water project effectiveness and sustainability.

PWX launched an SMS interface for receiving field reports on water and sanitation projects. This SMS-based reporting is designed for monitoring the implementation and post-implementation of the projects, by the people who are directly affected by it. Field personnel living and working in remote areas can send in SMS notes which are attached to the project reports transparently on the website. Field reports help managers and funders to monitor, track and address the issues. The technology behind PWX SMS Reporting is standard SMS technology at client side; and SMS gateway is txtWeb (by intuit) and Android gateway. The solution is free for non-profit members serving their communities. If the projects generate revenue or the operator is not non-profit, a monthly fee is charged per project. Three organizations have participated in the pilot, which are Project Well in Bengal, and Ekoventure and Humana People to People

Field personnel living and working in remote areas can send in SMS notes which are attached to the project reports transparently on the website



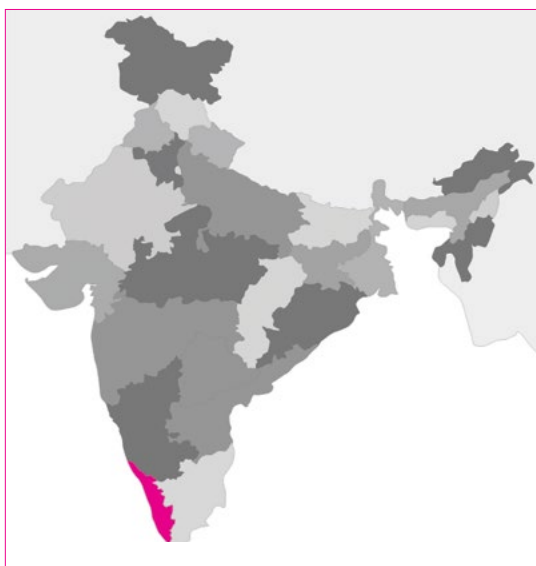
India in Tamil Nadu. PWX will gather feedback and will attempt to roll out the system across India. This application enables two-way communication allowing organisations to learn from each other with transparent distribution channels.

PWX converts the SMS received into a status report attached to the main project report on PWX. Field reports help managers and funders who work from far away locations to keep track of progress of the project and issues and act on them. These reports allow the entire organisations to learn and share since they replace bilateral communications with broadly visible storage and distribution channel.

Reach & Road Ahead

Through crowd sourcing, PWX also increases the resources available for monitoring and evaluation at very low costs to show long-term impact and results. PWX aggregates and facilitates many diverse solutions and resources targeting the global water and sanitation crisis. Till date, more than 65 agencies around the world have used Peer Water Exchange to peer review, fund, and implement small-scale water and sanitation projects, benefiting more than 3,00,000 people in local communities.

The intervention is already being utilised by four organisations in India, and three more are trialing. This service has helped in connecting the field personnel working in remote areas without internet coverage.



Mobiles for monitoring & tracking

e-Toilet

Organisation

Eram Scientific Solutions

Project Location & Coverage Area

Kerala

Project URL

www.eramscientific.com

Area of intervention

Water and Sanitation

India's first electronic public toilet

UNICEF estimates that about 594 million people, who constitute nearly 50 per cent of India's population, defecate in the open, with the situation particularly acute in impoverished rural areas. But the problem is equally acute in urban slum areas where public facilities are meagre. The lack of private toilet facilities is also a problem recognised across the country. The existing facilities also face neglect, and this is one of the main reasons why the existing structure is not in use by the public.

Eram Scientific developed India's first electronic public toilet, the 'eToilet', with unique automated features to maximize user experience (e.g. payment mechanism, doors, washing mechanisms). In this project, Eram proposes to refine the eToilet by minimizing water requirements, improving sterilization mechanisms, and reducing necessary power consumption. The venture has taken up the challenge of addressing public sanitation by developing a product that is portable, hygienically maintained, and eco-friendly.

The insertion of a coin opens the door of the eToilet for the user, switches on a light, thus saving energy also, and even directs the person with audio commands. The toilets are programmed to flush 1.5 litres of water after three minutes of usage or 4.5 litres if usage is longer. It can also be programmed to clean the platform with a complete wash down after every five or 10 persons use the toilet. After use, in case one forgets to flush, the automated flushing turns on and sterilises the commode too.

An e-toilet occupies around 20 square feet and has two doors - a sliding door at the front, and a normal door ahead of the toilet. As soon as the

Refining e-Toilet by minimising water requirements, improving sterilisation mechanisms, and reducing necessary power consumption

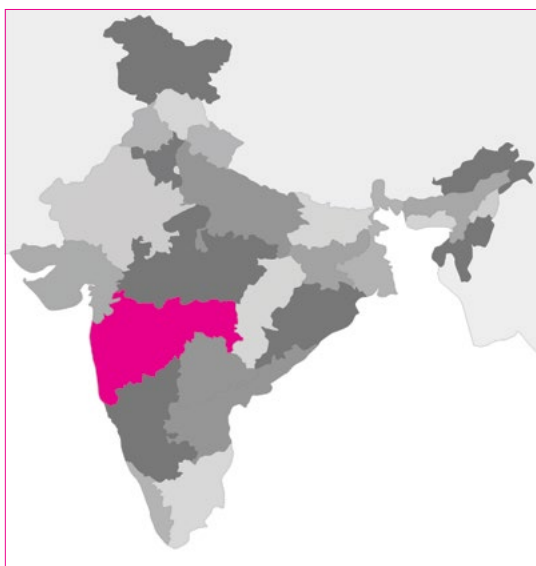


coin (entry charge) is dropped, the sliding door opens and the light and the exhaust fan come on. Inside the toilet there is a bucket, mug and all other items. In case the user does not flush the toilet after use, the system automatically does all the cleaning operations.

Reach & Road Ahead

Eram Scientific has deployed over 600 e-toilets in 11 states in the country, out of which more than 200 are in schools. Till date, over 200 Sewage Treatments Plants have also been set up across 13 states in India.

The cost of e-toilet varies from INR 3,50,000 to INR 8,50,000 (inclusive of bio-membrane reactor's price). The income generating model for these toilets is the advertisement panels attached outside and the collections everyday by the users. The present installations have been made possible by funding sources like the local area development funds, local self governments, corporate social responsibility funds, Lions Clubs and NGOs and trade organisations. Kerala is the first state in India to offer the connected toilet facility. The organization has also partnered with Toonz Academy and created cartoon characters on the front panels of the units to be installed in schools in Ernakulam to make students aware of cleanliness and hygiene.



Mobiles for monitoring & tracking

Mobile app to detect sickle cell anemia

Organisation

Indian Institute of Technology, Bombay

Project Location & Coverage Area

Maharashtra

Project URL

www.iitbombay.org/news/Current/iit-b-students-develop-low-cost-kit-to-detect

Area of intervention

m-Health

Mobile phone based diagnostic platform

Sickle cell anemia (SCA) is a very common blood disorder found in the tribal areas of India's central and southern parts like Odisha, Madhya Pradesh, Jharkhand, and Andhra Pradesh. There has been no cure found for the disease, but a treatment could help reduce the complications that arise due to crescent-shaped red blood cells that block the blood flow through the vessels. About five per cent of the children affected by sickle cell anemia die before they reach the age of two. Currently, the disease is detected in clinical settings by expensive techniques. Timely detection of the disease remains a challenge in this case.

Debjani Paul, Ninad Mehendale and Ammar Jagirdar from the Indian Institute of Technology, Powai are all set to revolutionize the use of mobile phones by developing a low-cost and portable lab-on-a-chip diagnostic kit that could detect sickle cell anemia. This affordable kit can be used even by relatively untrained health workers.

The kit will consist of a microfluidic chip combined with a mobile phone based diagnosis platform which could be used effectively in areas where there is no access to advanced diagnostic equipment. The tiny channels in the chip will trap blood samples in such a way that the sickle shaped blood cell is preserved for the next step.

The chip is disposable which reduces the chances of transmission of blood from one infected person to another. The patient will add a drop of blood, to a plastic microfluidic chip that is pre-loaded with reagents required to detect sickle cell anemia. The reacted bloods will then flow to a detection

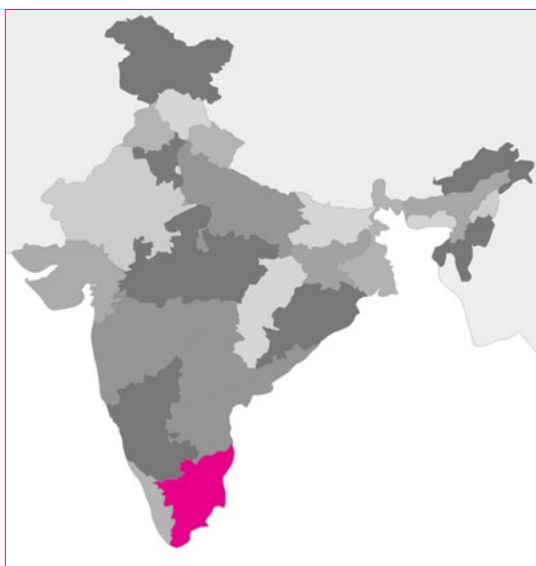
Revolutionising the use of mobile phones by developing a low-cost and portable lab-on-a-chip diagnostic kit that could detect sickle cell anemia



zone within the chip where the red blood cells will be imaged by a mobile phone camera.

Reach & Road Ahead

Paul and her team are planning to develop the kit in the next 18 months. This particular project was funded through a collaboration of the Bill and Melinda Gates Foundation with the Indian government's Biotechnology Industry Research Assistance Council (BIRAC) through the IKP Knowledge Park at Nalgonda in Telangana. The chip itself is low-cost and disposable, reducing the risks associated with transmission of blood from an infected person to the other. It is one of the good examples of radical innovations which also harness the increased use of mobile phones for a greater good.



Mobiles for monitoring & tracking

MocDoc

Organisation

Yro Systems Pvt. Ltd.

Project Location & Coverage Area

Tamil Nadu

Project URL

www.mocdoc.in

Area of intervention

Health

SaaS integrated mobile solution for hospitals

MocDoc is Chennai based Start-up founded by 35-year-old PM Senthil Kumar. It is a SaaS (software as a service) based integrated, end to end healthcare IT solution for hospitals and clinics. By streamlining business processes and providing key business insights accessible anytime anywhere, MocDoc aids in quick and better decision making. Using cloud to enable doctors to see the patients’ health data anywhere and streamline their busy schedule properly, thus, saving both their and patients time and provide better care as their previous visit history is accessible now.

The mobile app is equipped with a template based patient visit record capturing nine different templates for nine different specialties like General Medicine, Dental, Therapy, Eye, Pet/Vet, etc. which helps each speciality to capture vitals and visit inputs differently specific to their practice.

To use this app, doctors need to create a profile with MocDoc to avail the service. Once the profile is created, they can manage their availability and appointments online. The online presence helps doctors to reach a wider audience. Doctors also get a personalized url which can be provided in their prescription pads and visiting cards to encourage patients to go for online appointments.

While patients can search for doctors, view their profile and available time slots, book an online appointment after registering with MocDoc so as to reduce the patient’s wait in the clinic as well as avoid multiple phone calls to the clinic to know the doctors availability. Furthermore, it also gives the

Using cloud to enable doctors to see the patients' health data anywhere and streamline their busy schedule properly, thus, saving both their and patients time and provide better care as their previous visit history is accessible now



doctor a newer platform for discovery, and an internet savvy user can easily find a relevant doctor and the doctor gets the relevant business.

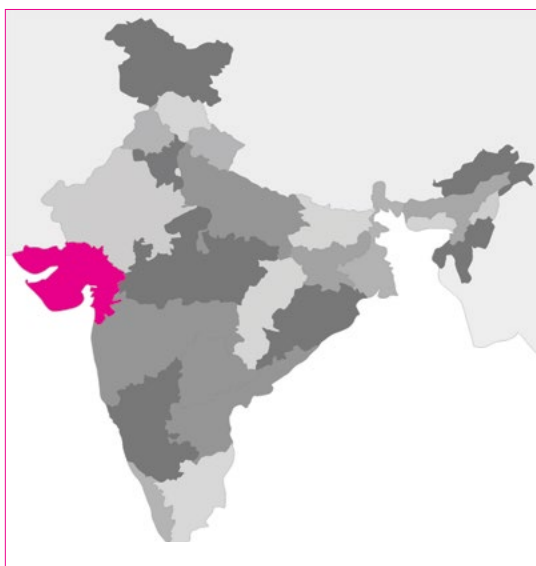
Reach & Road Ahead

MocDoc started with doctor online appointment booking and signed up more than 7000 doctors across India, and later launched clinic management system and hospital management system without and in patient management, pharmacy management, laboratory management etc.

It provides complete solution from online appointment to complete patient management with access to patient data anytime/anywhere by doctors and patients. MocDoc charges hospitals and doctors between INR 50,000 and INR 70,000 for a patient management system.

MocDoc started with 50,00,000 of investment and generated revenue close to 10,00,000 and projected to cross more than one crore this year. It is got more than 500 clinics using its clinic management solution and more than 50 hospitals using its hospital management.

Pricing for clinics starts at INR 5,000 a year with transaction costs. Patients who want to take charge of personal records can avail the service at INR 50 to INR100 a month.



Mobiles for monitoring & tracking

Smart Anganwadi

Organisation

Vadodara Municipal Corporation

Project Location & Coverage Area

Vadodara, Gujarat

Project URL

www.vmc.gov.in

Area of intervention

Health & Nutrition

Monitoring nutrition of anganwadi kids using mobile app

There are 13.3 lakh Anganwadi and mini-Anganwadi Centres (AWCs/ mini-AWCs) in India. These centres provide supplementary nutrition, non-formal pre-school education, nutrition and health education, immunization, health check-up and referral services of which later three services are provided in convergence with public health systems but are unable to track them in real time.

SMART Anganwadi is an initiative of Vadodara Municipal Corporation that attempts to improve the functioning and management of Anganwadis. Going a step forward towards achieving her 150-day target towards 'Gatisheel Gujarat', that is 'Forward Gujarat', the Chief Minister (CM), Anandiben Patel launched the mobile based application to attend the issues related to kids in Anganwadis of the Vadodara city. SMART Anganwadi is Android based mobile application linked with SMART Anganwadi software.

The mobile application helps in monitoring the weight of Anganwadi children, their health status, the quantity of milk supplied to them, the timings of milk, which would be displayed on the cell phones of the Anganwadi workers. The mobile application tracks the delivery and consumption of milk and fruit.

In the beginning all the children of each AWCs are registered along with their photo, name, height, weight, age, etc., based on these automated zones, a zone is allocated to individual child. As per Govt. of India norms, each zone is categorized in Red, Yellow or Green color. The color coding mechanism shows the progress reports of kids. As the condition of child

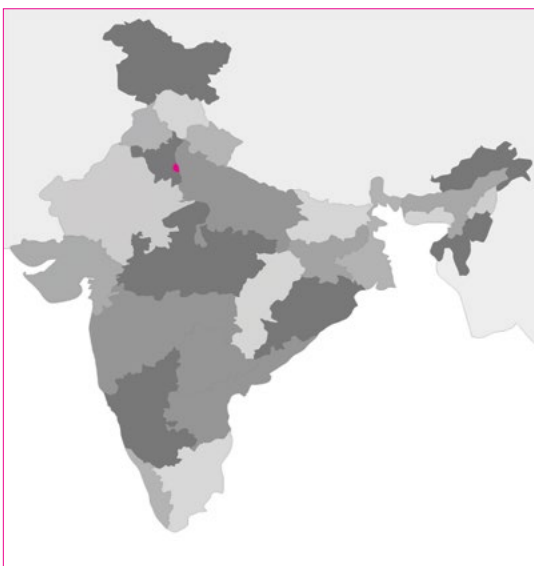
The mobile application helps in monitoring of anganwadi children weight, their health status, the quantity of milk supplied to them, the timings of milk, which would be displayed on the cell phones of the anganwadi workers



improves, the grade colour changes from red to yellow to green which will be displayed on the mobile of workers, thereby aiding constant monitoring and follow up. The application also develops monthly progress reports and Anganwadi workers and monthly reports of food delivery at Anganwadi centres.

Reach & Road Ahead

Presently, the project is active in eight Anganwadi centres of the selected 87 high priority Anganwadis of the Vadodra city. This service will gradually be provided to all of the 303 Anganwadis of the Vadodra Mahanagar Sevasadan. Developing and implementing cost including data collection/survey and training of the mobile app is INR 7,00,000. Mobile instrument cost INR.15,00,000 provided to Anganwadi workers.



Mobiles for monitoring & tracking

Safe Bridge

Organisation
Telerik India

Project Location & Coverage Area
Delhi NCR

Project URL
<http://www.telerik.com>

Area of intervention
Women Safety & Child Protection

Mobile app helping vulnerable groups

SafeBridge is a mobile app created to help vulnerable groups such as women, children, and professionals working late to send an emergency SMS with their location information in the case of imminent threat. The mobile app is designed and developed by software development, lifecycle and content management tools and solutions provider, Telerik.

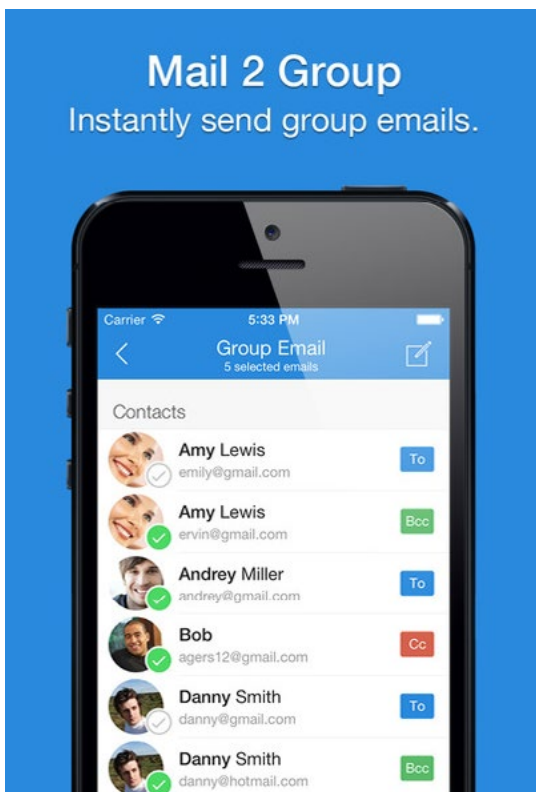
The app sends emergency SMSs to preset lists of trusted contacts with location information using GPS. At the start of the application, the user first preset the contacts of friends and family members who will be notified in case of an imminent threat.

Using the safety app is simple. At the start of the application, the user first must preset the contacts of friends and relatives who will be notified in the case of an imminent threat. To decrease response time in emergency situations the app involves just the one-touch function of simply pressing a “HELP ME!” button to send out an SMS with GPS information.

In an emergency situation, the app uses the one-touch functionality of simply pressing “Help Me” button to send out an SMS and location info. The app can also function with limited internet connectivity. There is an “I’m Safe” button to immediately notify contacts that everything is alright, in the cases when the threat is over. Telerik The “help” and “safe” messages can be personalized.

The application has a “Track Me” feature, which includes sending out the user’s current location at pre-determined intervals.

In an emergency situation, the app uses the one-touch functionality of simply pressing “Help Me” button to send out an SMS and location info

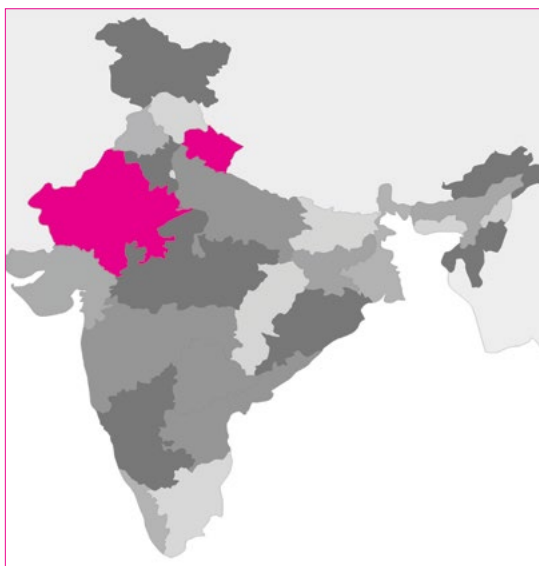


The safety application is created using Telerik’s products Icenium, an integrated cloud environment for mobile app development and Kendo UI, comprehensive HTML5 and JavaScript framework for modern web and mobile app development. The combination of the two products allows the app’s creators to quickly and effortlessly build the application for all types of devices, without the need to install platform software development kits.

Reach & Road Ahead

The application also includes a directory of police stations in Delhi. The beta version of the application is currently available for both low-end and high-end Android phones and will soon be available for iPhone and BlackBerry devices. The application also includes a Directory of police stations in Delhi.

Presently, SafeBridge is active in Delhi. Going ahead, Telerik’s team plans to add other Indian cities to this police directory as well as city-by-city contact information of hospitals and NGOs in the country. The app will soon include the option to report crimes that the user witnesses, but may not be the victim of the crime.



Mobiles for monitoring & tracking

Pukar

Organisation

People for Parity Foundation

Project Location & Coverage Area

Kota, Udaipur and Alwar (Rajasthan) and Nanital (Uttarakhand)

Project URL

<http://peopleforparity.org/pukar-app/>

Area of intervention

Women Safety & Child Protection

A personal safety app

Pukar is emergency reporting mobile app that sends live alerts on a web interface to local Police Control Rooms (PCRs). Developed and launched by People for Parity Foundation. Pukar is a personal safety app that allows users to send SOS alert to emergency contacts and to the local police station.

The app also sends location information to chosen contacts. Once the alert is received by PCR, it instantly contacts the nearest police station with location information, so that immediate action can be taken ahead. This App is not exclusively for women safety. Any person (female/male) in an emergency situation (eg. street harassment, stalking, theft, fire, road accident etc.) should use the SOS button in this personal safety App.

The location of the user is automatically refreshed in every five minutes while the user's phone becomes a GPS tracking device. Instead of sending a distress signal directly to police, the app first send an alert to message to five contacts stored in it. The contacts can then forward it to the police control room with an easy option of swiping or pressing another button. After tracking victim cellphone location in real-time, the app puts the phone on 'sleep mode' so that criminal may think that the cell is switched off.

Presently, it is freely available to all Android users, and does not necessitate any sort of infrastructure upgradation on part of the police.

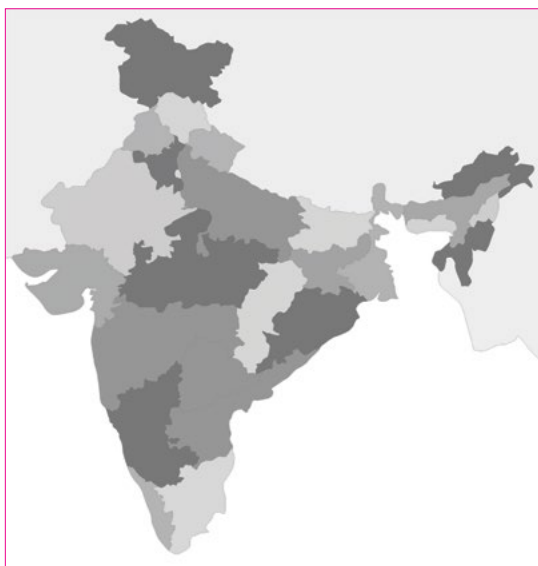
Allows users to send SOS alert to emergency contacts and to the local police station



Reach & Road Ahead

Currently, the app is active and running all over the country. Presently, PFP has made direct police linkage in the districts of Kota, Udaipur and Alwar in Rajasthan and Nainital in Uttarakhand. The App records 10 SOS presses every day and serves a community of more than 5,000 people across these areas.

The implementation cost of Pukar app in one district with 1,00,000 smartphone users cost is approximately INR 3,00,000 that means INR three per user. While the app itself is free, the cost includes the cost of connecting with police, outreach, campaign and awareness and technical support cost. Pukar is a city level project as it closely works in partnership with the local police. In a city with one million people, Pukar claims that it has the potential to reach out approximately 10 per cent of the population directly.



Mobiles for monitoring & tracking

Caddisfly

Organisation

TernUp Research Labs

Project Location & Coverage Area

Pan India

Project URL

<http://caddisfly.ternup.com>

Area of intervention

Water & Sanitation

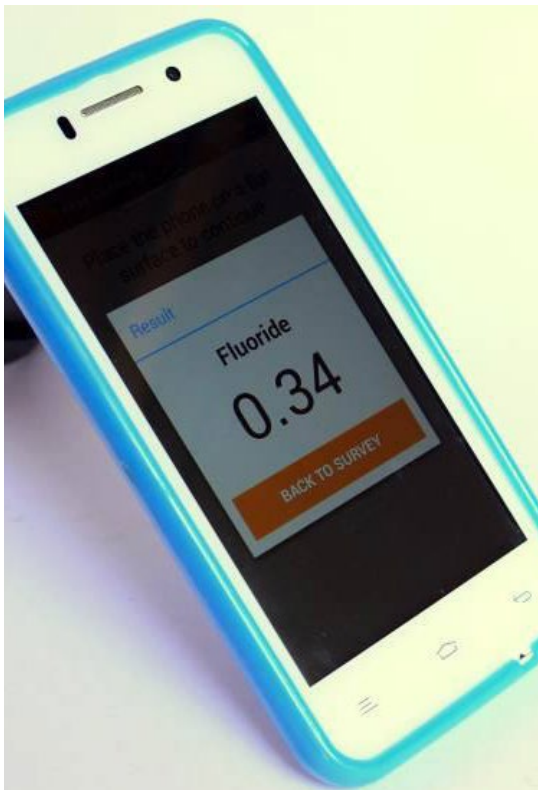
Automated chemical mobile test kit to test water quality

In India and elsewhere, fluorosis is a serious health issue, and more than 100 million Indians are at risk because they drink water containing fluoride or other contaminants such as arsenic or coliform bacteria. Existing water quality-testing procedures fall short in a number of ways. Field-test equipment is often hard to use and unreliable and lab tests are costly and slow. The resulting data is generally stored locally and not shared effectively.

Caddisfly, an open source system is a combination of automated chemical test kit and mobile devices to test the quality of water. Ternup Labs team, Bangalore based Research firm has developed this innovative testing kit. Caddisfly is simple, fast, portable and low-cost drinking water testing kit that can be used anywhere to test the level of fluoride in drinking water, using a smartphone. This simply connects to the micro-USB port of the phone and test results are read by the Caddisfly app. After testing, the data can be accurately mapped and shared online to evolve locally relevant and sustainable systems for better drinking water. Interestingly, both hardware and software are open source.

To test the quality of water, fill the reusable test chamber with a sample of water attach it to the phone case of the smartphone and just need to run the Caddisfly app. At last, place the smartphone facedown and wait around a minute to have loud click sound. The fluoride test result is now displayed on the smartphone's screen. The kit is also linked to mobile phones via a Bluetooth connection that could then upload the results on to GPS.

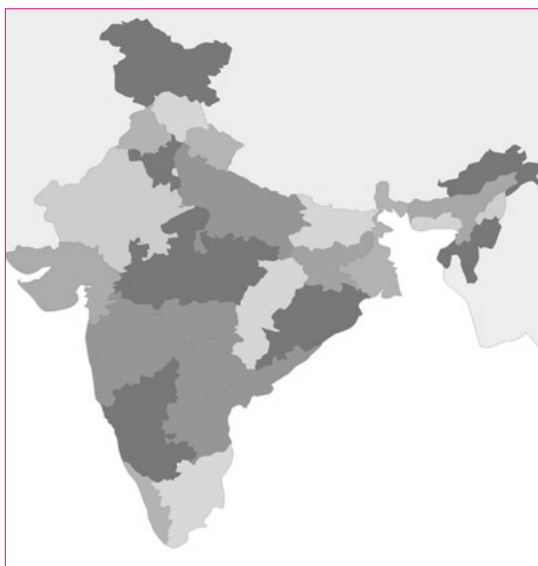
Simple, fast, portable and low-cost drinking water testing kit that can be used anywhere to test the level of fluoride in drinking water, using a smartphone



Reach & Road Ahead

In 2013, TernUp partnered with Akvo to develop Caddisfly and became Akvo's R&D hub, in India. Presently, TernUp is starting the pilots in India, Kenya, and Burkina Faso. TernUp has also received funding from the World Bank through its programme Water and Sanitation Program (WSP).

Caddisfly is also looking for investment support from ICCO, SNV and Aqua for All, and working with the Unesco IHE laboratory in Delft, Netherlands, to validate the design of the Fluoride test and other tests.



Mobiles for monitoring & tracking

Lunacycle

Organisation

MTI Ltd & Zero-Sum Wireless Solutions India Pvt. Ltd.

Project Location & Coverage Area

Pan India

Project URL

www.lunacycle.net

Area of intervention

Health & Nutrition

A personal mobile app for women’s health and hygiene

Women may be failing to become pregnant or getting pregnant by accident because they do not understand their own menstrual cycles and underestimate how long they last. Researchers analysing the cycles of thousands of women found that their periods occurred on average closer to every 30 days than the 28 traditionally cited.

Lunacycle is an easy to use, application for women who wish to conceive. Lunacycle is a collaborative effort of Zero-Sum and MTI Ltd. LunaCycle is a women health and fertility tracker application to track their periods, calculate their average length, predict when they will be with precision, and project their fertility based on the time of month. The app also helps women to track their body weight, their diet, and achieve fitness goals.

Lunacycle predicts the next period cycle and ovulation dates and also keeps user informed about her body condition according to the stage of the cycle. The application supports all Android smartphones and tablets running on Android 2.3 and above and iOS devices running on iOS 6 and above.

It will not only tells the best days of pregnancy, it also informs about avoiding pregnancy by giving insights on fertility awareness about when not to have sex, which can be quiet effective in birth control. Apart from accurate period tracking and ovulation calculations, the super app also allows track the body weight and body fat, which is of key significance during pregnancy.

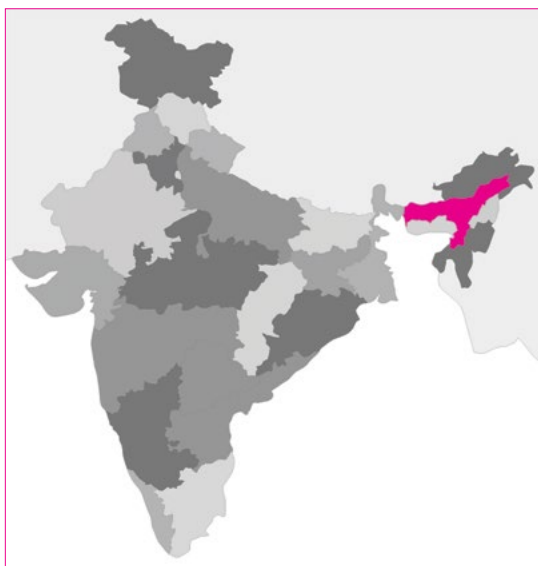
Empowers women to track their periods, calculate average lengths of them, predict the next period date with precision and project their fertility



Reach & Road Ahead

After a month and a half of its launch, the app gained 1,00,000 users on iOS and Android platforms, with maximum downloads from metros such as Delhi and Mumbai. With over 400 thousand users of Lunacycle across India, it is helping women predict period dates; and ovulation dates accurately! This easy to manage application has also found a large user base in Japan with over 6 million users in its Japanese version Luna Luna. The company is also planning to tie up with various cosmetic and sanitary pad companies.

The app has been downloaded about 4,00,000 times so far, with 5,000 new downloads every day. Apart from TV commercials on channels like UTV Bindaas, Channel V and Life OK, the company is also promoting the app on social media networks like Facebook. The mobile app is most popular among people between 25 and 35, from where it gets 70 per cent of the traffic. All information on the app is available in English and can be downloaded for free of cost.



Mobiles for monitoring & tracking

ICT Solutions including real time monitoring using mobile phones to address health systems

Organisation
UNICEF Assam

Project Location & Coverage Area
Assam

Project URL
<http://www.unicef.in>

Area of intervention
Health

Mobile based real time monitoring to access health systems

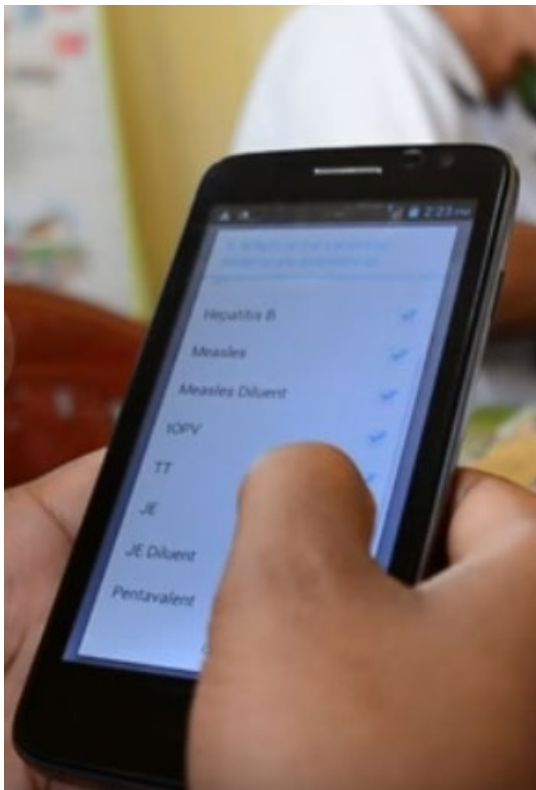
UNICEF Assam initiated a project titled, 'ICT Solutions including real time monitoring using mobile phones to address health systems' to strengthen the cold chain system across the state under the GAVIHSS (Health system Strengthening) project. The project uses android based mobile application that can be segmented into two major areas, data collection systems, and data dissemination systems. The mobile application called SDRC Collect was based on the widely adopted ODK platform. The android application communicated with a centrally hosted data aggregation system called ODK Aggregate which is a GWT based web application. After collecting the data, it is collated into a DevInfo database.

This application allows data collection across multiple platforms mobile, desktop and tablets in real time without any additional programming requirements. It is available royalty free and does not require licensing. It is available free of cost as it is developed in open source (ODK).

The database and the web applications are hosted on industry standard hardware infrastructure located in secure environment at STPI (Software Technology Parks of India) facility in Bhubaneswar, Odisha. The application is serviced by a third party vendor, SDRC Pvt Ltd (www.sdrc.co.in), who is responsible for the upkeep and maintenance of the site.

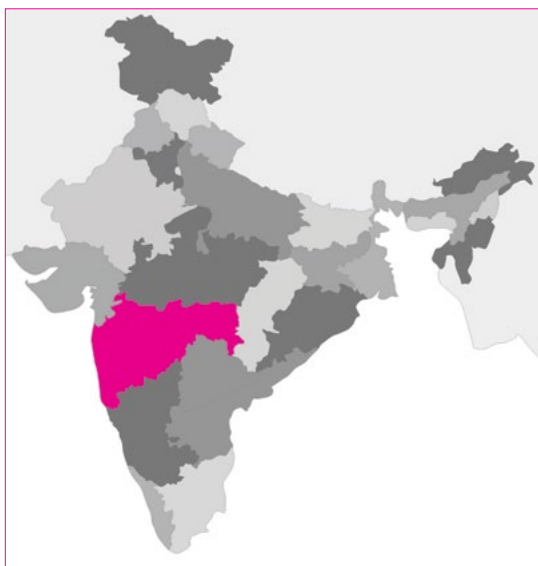
Using this application, UNICEF Assam is monitoring 805 health institutions delivery points, 792 cold chain points (CCPs). This further helps in monitoring of ARMNCH+A & RI supervisory visits.

The project uses android based mobile application to collect data in real time and helps in data disseminations



Reach & Road Ahead

Rapid scale up of the real-time supportive supervision across all 27 districts of Assam within record time of four months covering 469 health facilities out of 805 (58.2 per cent) and 448 cold chain points out of 792 (56.5 per cent) could be achieved using technology. UNICEF Assam is presently received funding from GAVI (Global alliance for vaccines and Immunization) for health system strengthening in India for three years - 2014 to 2017. UNICEF Assam is also engaging medical colleges to bring further sustainability in the project.



Mobiles for monitoring & tracking

Little Sisters

Organisation
SNEHA

Project Location & Coverage Area
Mumbai, Maharashtra

Project URL
www.snehamumbai.org/index.aspx

Area of intervention
Women safety & child protection

Preventing violence against women

Violence against women is pervasive in India and much of it – domestic violence, dowry deaths, acid attacks, honour killings, rape, abduction and cruelty – is at the hands of family members. Data from the National Crime Records Bureau (NCRB) shows that an Indian woman is most unsafe in her marital home: 43.6 per cent of all crimes against women are by husbands and relatives.

Mumbai based organization SNEHA (Society for Nutrition Education and Health Action) has launched Little Sisters project to help women to tackle the social issue of domestic violence with mobile phone technology.

Funded by the UN development programme, the project trained 160 local women called Sangini to identify and report incidents of gender violence using Android smartphones. At the press of a button they can raise an alert and register a case with complete details of the perpetrator. The project uses smartphone for crowdsourcing notification, tracking and response coordination system for domestic violence. It uses smartphone survey form using the Open Data Kit to increase reporting and map domestic violence incidents. The system is linked with EyeWatch, an emergency alert system that is integrated with its response coordination system of field staff. This helps in live tracking, mapping raising emergency response and video-audio recording. The Sangini's next step is intervention which she does either by giving home counselling or by bringing the victim to the SNEHA counselling centre.

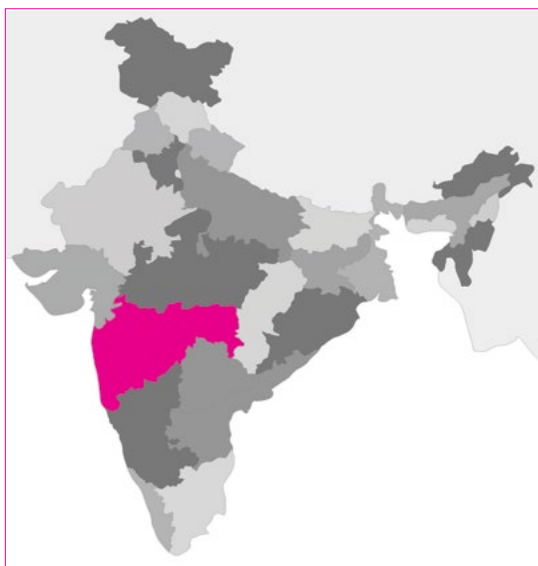
Helps women to tackle social issue of domestic violence with mobile phone technology



Little Sister is also linked with a toll free number distributed to the women facing domestic violence. Whenever, survivors face another incident of violence, they can send a missed call to raise an alert for immediate intervention. SNEHA also sends an inconspicuous SMS periodically to clients to prevent any form of repeat violence on them. SNEHA has also developed a Little Sister Club of 10 youths in the community to intervene in domestic violence issues.

Reach & Road Ahead

Presently, the project is active in Dhravi region of Mumbai, Maharashtra. So far, 255 survivors have been benefitted and addressed 5,000 cases of violence. SNEHA has received funding from the UN Development Program (UNDP) and Vodafone Foundation for Little Sisters project. Little sister is a crowd source platform that will identify, quantify, map violence and provide timely intervention to prevent ongoing and recurring violence.



Mobiles for monitoring & tracking

Silent Observer

Organisation

Sukrut Systems

Project Location & Coverage Area

Kolhapur, Maharashtra

Project URL

www.betibachao.in

Area of intervention

Health

SMS based tool to fight female foeticide

Pune based Sukrut Systems has developed SMS based tool, Silent Observer, which is a tool to check under-reporting and false reporting of sonography cases by doctors in India. The system automatically updates a server for which an ultrasound machine is used. This way, the device 'Silent Observer' (SIOB) also provides law-enforcing agencies with analytical reports for further action warranted under the Preconception and Prenatal Diagnostic Techniques (Regulation and Prevention) Act.

Silent observer updates the status of itself using SMS services on how many Sonography records have been recorded on a particular day, ON time, OFF time and LIVE time to ensure feeding these logs in SMS format to a centralized MIS. It consists internal web browser, authentication based access, inbuilt configuration and provisioning system.

The captured information is stored in an encrypted format to avoid any mishandling of data. In addition, the information is compressed in a pre-configured video or image format to save on storage space. The storage space is configurable up to one terabyte. Once Silent Observer is fitted in the sonography machine, it maintains a log of all sonography tests and helps to keep a record of each pregnancy test and each pregnancy termination case. Using this data, government uses checks whether the hospital / owner of the machine has filled the 'Form F' which is required to be filled in every time an ultrasound test of a pregnant woman is conducted.

Coupled with Sonography machine on one end and F-form reporting system on the other, Silent Observer, addresses the issue to a great extent

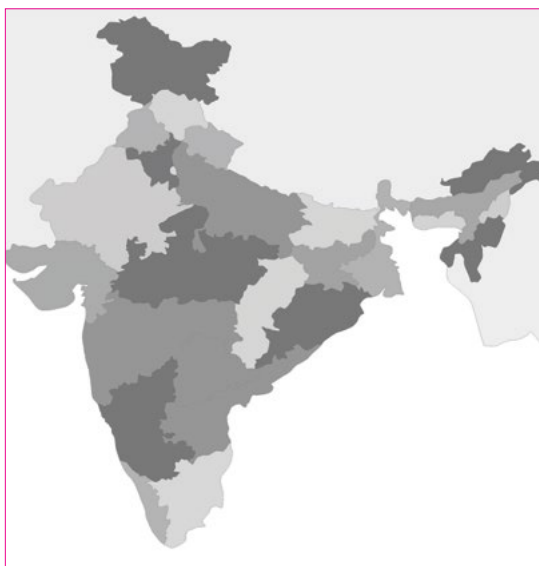
Providing law-enforcing agencies with analytical reports for further action warranted under the Preconception and Prenatal Diagnostic Techniques (Regulation and Prevention) Act.



keeping a continuous watch on the reporting system. Due to the above mentioned benefits of the SIOB the chances of sex selective abortion has been drastically reduced and any offenders of the PC & PNDT can be brought before the law.

Reach & Road Ahead

The cost of the device is INR 28,500. It is borne by doctors at present, and they later get a full refund from the state government. Sukrut System has installed 235 silent observer systems since 2010. In 2011, it was found that after installation of Silent Observer in Kolhapur, the number of Form F submissions increased from 10,000 to 15,000. This way, Silent Observer is positioned for online and offline monitoring of the sonography machine activities as per the requirements of implementing by appropriate authorities.



Mobiles for monitoring & tracking

MyNINO

Organisation

Silver Touch Technologies Limited

Project Location & Coverage Area

Pan India

Project URL

www.silvertouch.mobi/mynino

Area of intervention

Women Safety & Child Protection

Mobile based platform helping parents to track their child

MyNino is mobile based smart tracking application developed by Silver Touch Technologies Limited to track children. MyNiño is a cross-platform application that helps parents to track their child's information such as GPS location, call reports, incoming/outgoing SMSs straight on their smartphones. In addition to this, MyNiño allows parents to Geo-fence Child's device by setting the radius.

MyNino can be installed on child device that sends reports of child activities such as dial ed/received calls, incoming/outgoing SMS, contacts saved on child smart phone at time interval set by parents. Along with calls, SMSs and contacts, MyNiño also help parents to track their child's GPS location at regular intervals; thus keeping the parent aware of their child's whereabouts all the time. The app comes with two versions - Parent Application and Child Application. The Parent application needs to be installed on parent's smartphones while child application needs to be on child's smartphone.

A parent can manage the Child Report settings from parent application without actually operating upon the child device to receive the child reports at desired time intervals. Based on the settings done by the parent, the reports will be sent from the Child application to Parent application. From Parent application, parents can manage Notification and SOS settings to receive the desired report.

The application uses Wi-Fi Connection and GPS service on parent & child application to receive child reports on parent device. Once the app has

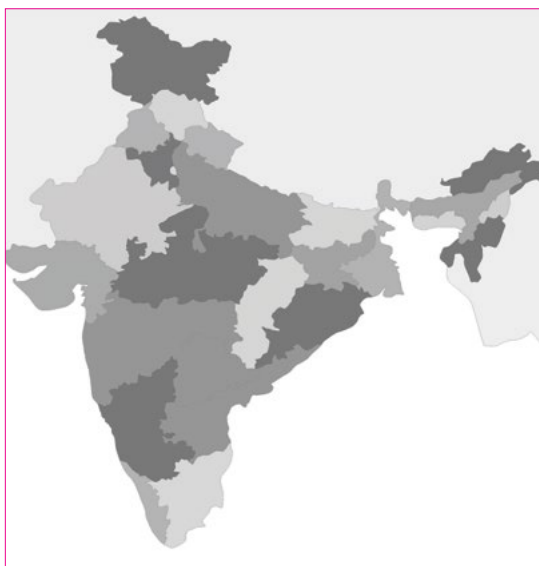
Help parents to track their child's GPS location at regular intervals; thus keeping parents aware of their child's whereabouts all the time



been installed, it notifies the parent through Calls, SMSs, Contacts, Location and Geo-Fence reports. The app highlights /filter the SMSs by predefined words known as Cusswords. Those words could be four letter words, sexual intonations, Drugs etc. The messages contained those words will be highlighted with the red mark. Parent can set SOS time interval to receive alerts if the child device is not sending reports.

Reach & Road Ahead

This application has no limitations for tracking the child, and parents can track 20 children from one device at a particular time. The application uses Wi-Fi Connection and GPS service on parent and child application to receive child reports on parent device. MyNiño Parent application is available in two languages - English & French. MyNiño is cross-platform application that connects Parent and Child on similar or different platforms - iPhone, Android, Windows, Blackberry and Web.



Mobiles for monitoring & tracking

My Baby Diary

Organisation

TELiBrahma Convergent Communications Pvt. Ltd.

Project Location & Coverage Area

Pan India

Project URL

<http://www.telibrahma.com/>

Area of intervention

Health

App for parenting a child

In a country like India where doctor to patient ratio is 1:900, doctors are few and the work is extensive. The patients demand low cost, timely and quality healthcare coverage. For the healthcare enterprises, patient data is critical to collect and manage and hence mHealth is primarily aimed at bridging the economic divide in terms of healthcare. Mobility is the key here and mobiles can be used for preventive care as well.

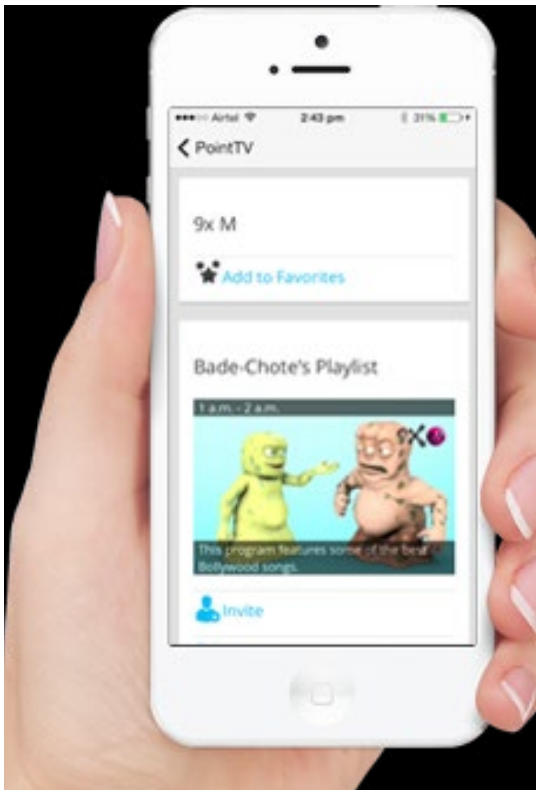
My Baby Diary is specifically designed for mothers to take care of their babies’ right from the pre-natal stage to toddlerhood. The application is developed by TELiBrahma and promoted by Johnson & Johnson.

Parenting a child is quite a ride per se, and especially for working mothers who constantly oscillate their roles from one extreme to the other in a quest to maintain work-life balance. This mobile application “my Baby Diary” allows mothers to set a reminder for the next due vaccination.

Other fun and interactive elements included taking pictures, trying out various hats and hairstyles on their babies, virtually dressing up the babies in animal costumes, etc. these photos could also be shared on Facebook in a single click.

The app included various engaging content, both for the mother and the baby. For instance, the mother could track the vaccination details, read up facts about pregnancy, labour & birth, babyhood, toddlerhood, etc. She could also instantly create a scrapbook of her baby and capture the defining moments of the baby via ‘Happy moments’ and ‘my Baby Calendar’ features.

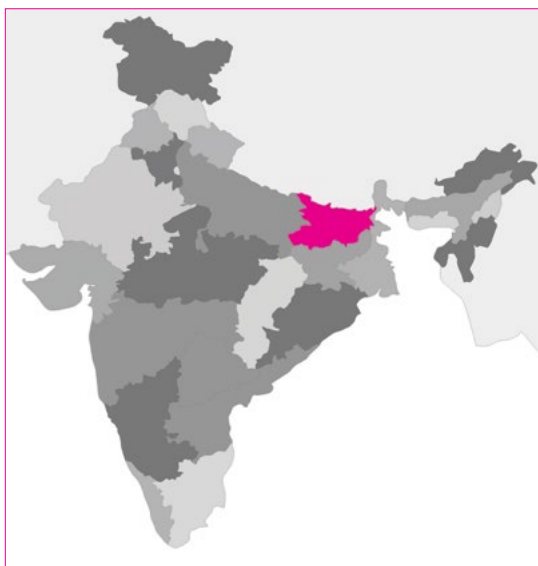
My Baby Diary enables mothers to take care of their babies' right from the pre-natal stage to toddlerhood



Reach & Road Ahead

Apart from the app being made available on Android market and iStore, the brand leveraged Buzz network to distribute the app to on-the-go women. With the capability to identify and deliver the right content to the phones that users carried, Buzz ensured the right target.

The app reached over 50,000 mothers in a span of seven weeks with Bangalore recording the highest number of downloads. This mobile application has looked at an opportunity to engage with young mothers – with the growing trend of smart phone users. There were challenges in maximizing the health impact rather than just the number of women and children reached. The application has received about 3,000 downloads in the span of five months without any exclusive promotion for the app.



Mobiles for monitoring & tracking

Continuum of Care Services (CCS)

Organisation

CARE India, Dimagi and Grameen Foundation

Project Location & Coverage Area

Bihar

Project URL

NA

Area of intervention

Health & Nutrition

Comprehensive mobile tool for FLWs

Bihar is one of India's largest and poorest states with over 100 million people. The state has one of the country's highest rates of maternal, neonatal and infant mortality. To address MNCHN-related challenges, CARE India along with the Government of Bihar (GoB) and other partners, as part of the Integrated Family Health Initiative (IFHI), launched the Continuum of Care Services (CCS) that offers a comprehensive tool for mobile workers, providing coordinated care for one million people in Bihar, India. Its aim is to cover the 1000-day window of pregnancy through the child's second year of age, to deliver 'the right messages at the right time' to pregnant women and newborn children within the community.

CCS uses mobile phone to facilitate operational ease; automate tracking of mother and child health status; deliver customized counseling in the local language; support monitoring and handholding of FLWs; establish a system of validated information on field-level health service delivery; make this information available in real time to the decision makers and planners; and design a health information system with the potential to be integrated within GoB's mother and child tracking system (MCTS) and eventually strengthening it. By digitizing data at the field level, the CCS mobile application improves accuracy and timeliness, and allows for smart data management of health service delivery.

Additionally, CCS has created a continuous and credible digital record of healthcare data, generated at the village level, and made it available to managers and decision makers in real time. This helps them to not only monitor progress but also to make informed program implementation-

Delivering right message at the right time for pregnant women and mothers of newborn child

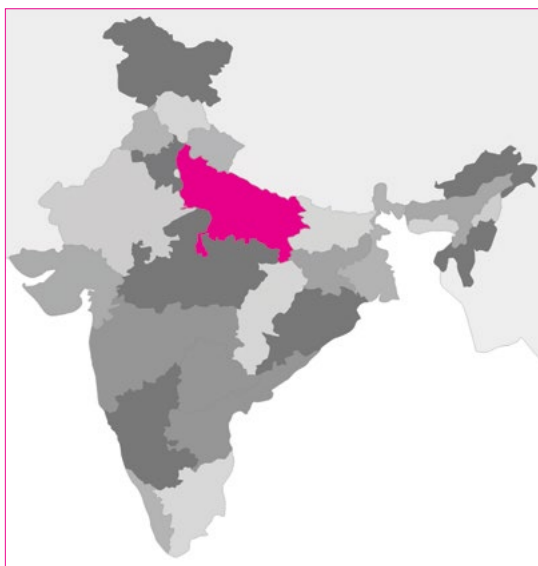


related decisions and provide supportive supervision for increasing reach, quality and timeliness of healthcare services.

Reach & Road Ahead

Launched in July 2012, CCS is being implemented in Saharsa district of Bihar through 512 FLWs, supported by 58 supervisors and 12 managers to deliver health and nutrition services to a population of 8,50,000.

FLWs, their supervisors and managers have been equipped with mobile phones, along with initial handholding support and training. In a 16-month duration, a total of 22,381 women and children have been registered under CCS and 1,81,451 home visits conducted by FLWs. Care India has partnered with various organizations including Bill & Melinda Gates Foundation, Government of Bihar, BBC Media Action, Grameen Foundation, Dimagi for sustaining the project.



Mobiles for monitoring & tracking

Safe Noida

Organisation

Social and Development Research and Action Group (SDRAG)

Project Location & Coverage Area

Gautam Budh Nagar district, Uttar Pradesh

Project URL

NA

Area of intervention

Women Safety & Child Protection

A mobile app for women rights and safety

Harping on the success of mobile technology in communication, Social and Development Research and Action Group (SDRAG), Noida based non-profit organization has developed Safe Noida mobile app that aims to fill the gap between information and civil society, particularly the women and young girl.

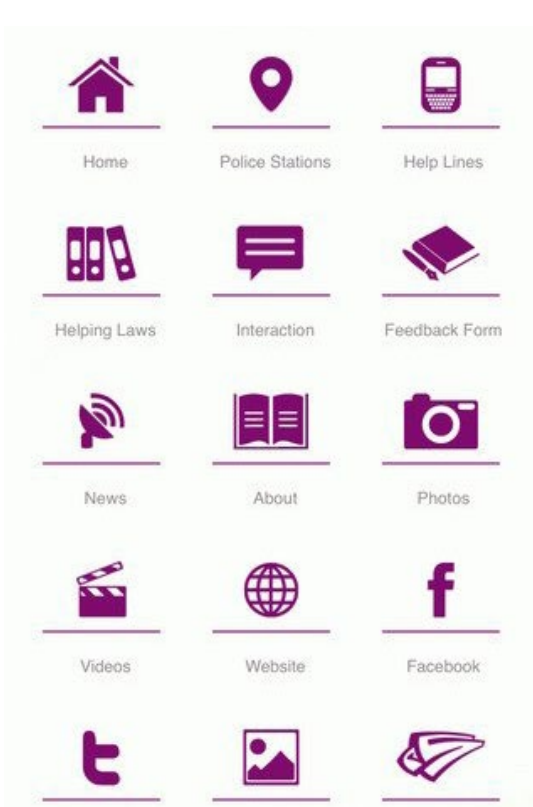
The App was conceptualised to provide women the information on whom, where and how to register the complaint, provide the youth an interactive platform to share their experiences and concerns. It spreads awareness on laws, rights and provisions provided by government on violence against women.

The app is equipped with all necessary information for women in the district Gautam Budh Nagar in the state of Uttar Pradesh. In an emergency, women can immediately call the nearest police station by just pressing police station icon and pressing Near Me button that will show the contact details of the nearest police station from user's current location.

The mobile app also provides safety tips, do and don'ts when women are traveling alone in public and private vehicles, etc. To redress the issues of domestic violence, there is section that provides information how to file an FIR (First Information Report), its importance and protocol.

The app occupies less than nine MB of total space, therefore, it can be easily stored in any mobile with limited space. Once data has been downloaded in the mobile App it can be accessed without the help of internet thus

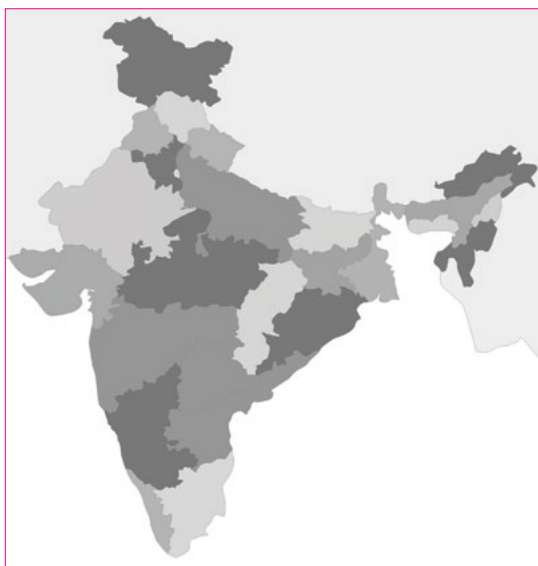
Providing information to women on whom, where and how to register the complaint, and giving youth an interactive platform to share their experiences and concerns



saving money / data charges of people with limited budget. Though the information provided here is focused on a district, yet one can access this information from any part of the world.

Reach & Road Ahead

The app is primarily limited to Gautam Budh Nagar in the state of Uttar Pradesh. Safe Noida app was supported by National Mission for Empowerment of Women, Ministry of Women & Child Development, Govt. of India, under the Women Empowerment Project. The cost for developing the app was INR 1,30,000. The App can be downloaded for free from Google play and itunes by Android and I phone users. The app is available on both languages – English & Hindi.



Mobiles for monitoring & tracking

Pocket Chemist

Organisation

HealthKart Plus

Project Location & Coverage Area

Pan India

Project URL

www.1mg.com/

Area of intervention

Health

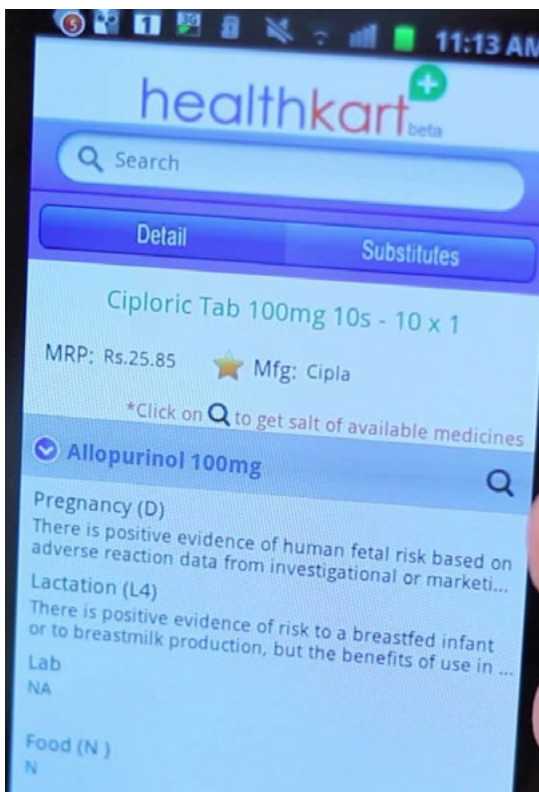
Move around with a pharmacy in your pocket

HealthKart Plus is a web, mobile and SMS application that discovers cost-effective generic drugs that could substitute prescription medicine. It is Android and iOS based app linked with online portal to access medicinal database for the common man, for physicians, medical students, nurses and other healthcare professionals. It is used for clinical information and as a medical dictionary. Naming it as Pocket Chemist, the platform allows users to discover cost effective generic drugs that can substitute prescription medicine. Apps on Android and iOS offer similar functionality to search for medicines and find out their content.

Pocket Chemist comes with features like search for drugs, get full information on the searched drug and over-the-counter medication like the dosages, common usage and warnings. By simply uploading the prescription, the consumer can place orders and refer to records of previous prescriptions. A dedicated team of pharmacists and experts read the prescriptions that are uploaded, so rest assured, there would be little chance of error in the order a consumer has placed.

Besides these, it gives cost comparison tool for generic and prescribed drugs. As online stores can offer only over the counter drugs that do not require prescriptions, therefore, HealthKart is tying up pharma chain like Apollo pharmacy, or the retail pharmacy chain under Apollo Hospitals Enterprise Ltd., or Religare or any other retail chain company, to offer a pick-up or home delivery service. These retail stores offer home delivery services and could perhaps find a way to verify prescriptions, but then it'll also increase costs.

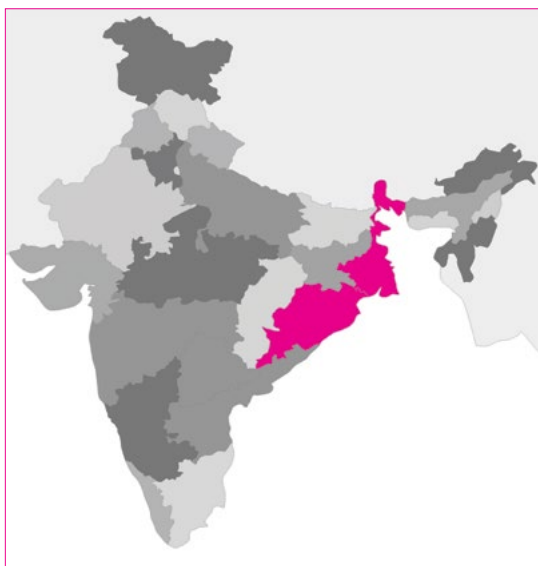
Android and iOS based app linked with online portal to access medicinal database for the common man, for physicians, medical students, nurses and other healthcare professionals



Reach & Road Ahead

As of now, the platform gets over 10 million hits on the web and app platforms, which clearly signifies the fact that a lot of people are looking for this information. On Google Play Store, the company's app has been ranked the top medical app with close to 850K downloads while iOS version amassed 450K downloads.

Gurgaon-based HealthKart had raised INR 27 crore (\$5.2 million) as Series A round of funding from Sequoia Capital and Omidyar Networks. The company had earlier raised over USD one million from KAE Capital and Sequoia in seed funds. The company also offers a free app on Android, iOS and Windows 8 platforms.



Mobiles for monitoring & tracking

Wireless Health Incident Monitoring System (WHIMS)

Organisation

iKure Techsoft (P) Ltd

Project Location & Coverage Area

Kharagpur (West Bengal); & Odisha

Project URL

www.ikuretechsoft.com

Area of intervention

Health

Proprietary cloud-based software

Rural patient who usually travel large distances to consult specialists, do waste their time traveling, or waiting in the queue. With the aim to deliver quality health care at the grassroots, iKure developed proprietary cloud-based software called, Wireless Health Incident Monitoring System (WHIMS) that allows rural doctors to collaborate and seek support from a specialist working at a different location by sharing a patient's health profile and symptoms.

Given the fact that not all rural areas have internet access, WHIMS has been designed to be accessed through tablets and smartphones using mobile network (2G/3G). The cloud-based application is best suited for a Hub-and-Spoke model implementation because of its scalability. Thus, a large number of rural patients can be served using the network. They have also integrated basic medical equipment (Sphygmomanometer, ECG, Glucometer, Phonocardiogram etc.) into the WHIMS application, so data is seamlessly captured without human intervention.

WHIMS does not require very high bandwidth for data transfer and can work in areas where supply of electricity is erratic. WHIMS is equipped with features like patient management, medical information, inventory management, etc. The monitoring device is enabled with video-conferencing applications that help in storing patient's medical history and record consultations for future reference.

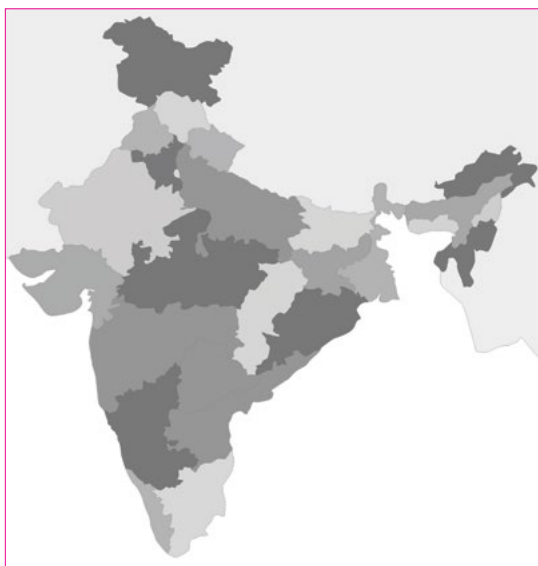
Equipped with features like patient management, medical information, inventory management, etc.



Reach & Road Ahead

Currently, iKure's business model has two revenue streams: fees from doctor consultation and diagnostic services. iKure business model is also based on making affordable, quality healthcare accessible to rural India by establishing community based brick-and-mortar health centres, backed by remote monitoring technology and each RHC cost 1/10th of the telemedicine set up cost (INR 80-100 cost per visit vs. INR 120-INR150 by the nearest providers for consultation).

The project has now 28 RHCs and hubs in Birbhum and Midnapore districts of West Bengal with certified doctors, integrated biometric equipment and diagnostics, medicine and pre and post-surgery consultation. The company is also planning to expand in Orissa, Bihar, Assam, and eastern India with an additional 100 RHCs.



Mobiles for monitoring & tracking

Swachh Bharat

Organisation

Swachh Bharat

Project Location & Coverage Area

Pan India

Project URL

<http://swachhbharatapp.com>

Area of intervention

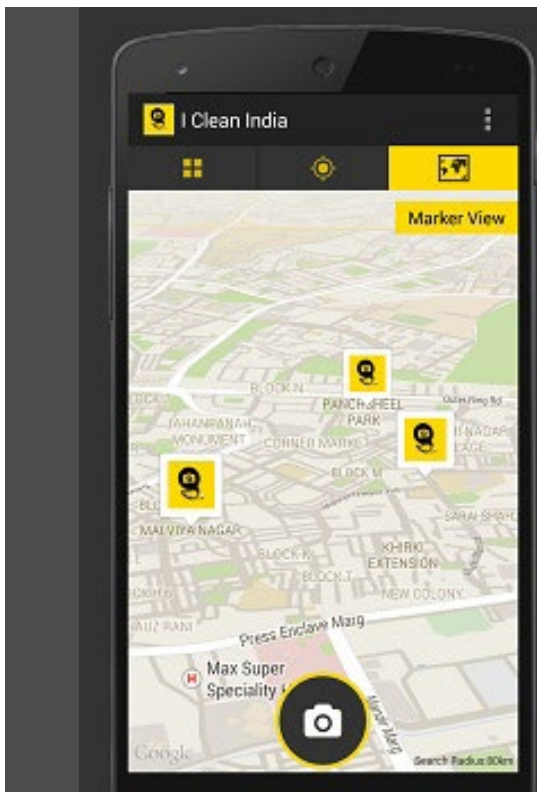
Water & Sanitation

A mobile governance solution for cleaning India

In support of the Prime Minister's (PM) mission, an ordinary citizen named Mahek Shah launched the Swachh Bharat Clean India Mobile App in September 2014. Clean India App, a mobile governance solution, where users can report dirty places with a tweet and a picture which is then sent to the PMO. The app uses users' twitter account for reporting mechanism. The user has to log in through Twitter if he/she wants to report a problem. Though Twitter is used by only a certain section of the community and not everyone has a Twitter account, Shah believes that the government is much more active on Twitter than any other platform. Once a photo is clicked, the app automatically finds its location using Google Maps and an auto generated tweet is sent to the PMO. So all a person has to do to make a complaint is to click a picture. This app not only enables ordinary citizens to report civic problems to the municipal and government authorities, but brings the issues to the notice of the PM himself.

The app has other interesting features apart from reporting. These include live updates from the Swachh Bharat Mission across the country, videos and tutorials on spot-fixing, the ability to view or create Swachh Bharat spot-fixing events happening around the country, the ability to browse and view their Facebook page which shares more information on spot fixing by individual groups or information shared by village councils and block officers. Users can access the other features of the app without a Twitter login.

The app enables ordinary citizens to report civic problems to the municipal and government authorities, but brings the issues to the notice of the PM himself



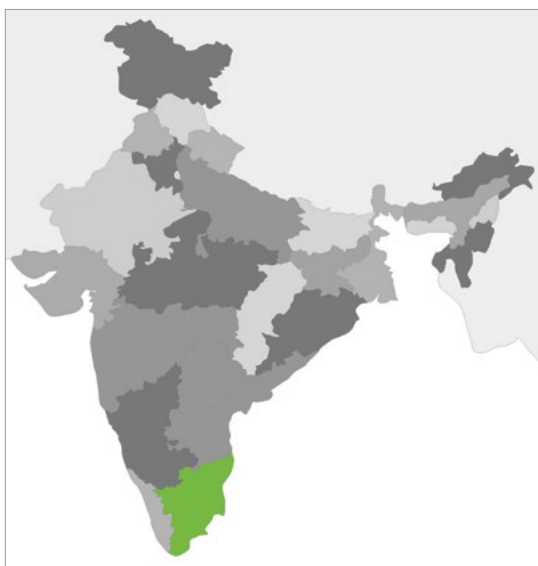
Reach & Road Ahead

The app has been downloaded by 12,000 smartphone users, out of which 5,000 are actively using it. Though the app has more than 5,000 downloads, it has been instrumental in getting only 10-15 places 'fixed'. The photos which are uploaded are monitored by Shah, as many people upload same photos repetitively and some of them are even fakes.

Three hundred reports have been filed so far using this app and out of these 180 are genuine reports. So far, more than 15 issues have been resolved. The version one of app is open-sourced – anyone can pick up the code from github and clone it to make a local version. The app can be downloaded from the Google Store. It is an Android app.

MOBILES FOR TRAINING OF FRONTLINE WORKERS

The frontline workers are an important part of the bottom-line, in project delivery outcome and impacting beneficiaries in desired way. Training of workers is an important strategy for improving workers' productivity in allocated work field. Use of mobile technology has emerged as relevant and efficient tool to train the work force and achieve desirable project impact. For instance, frontline health workers with mobile phones capturing complex data on pregnant women and children, women receiving SMS text reminders before their 'due' dates, mobile phone based training courses for health workers can streamline and enhance the quality of maternal and child health services. Interpersonal communication involves one on one conversation or individuals interacting with many people within a group, community or society that helps to construct, negotiate and address a social reality or problem. Mobiles as one the most personalized tool has emerged as an effective medium for interpersonal communication assisting in sending and receiving messages, listening, asserting, sharing feedbacks and reactions. This has transformed both individual and group centric interaction and behavioural and social change.



Mobiles for supporting frontline workers

Amrita Clinical Decision Support System

Organization

NRHM, SMC, IIT-K

Project Location & Coverage Area

Tamil Nadu

Project URL

www.newdigm.com

Area of intervention

Health

Mobile based decision support system for VHPs

Many people lack proper health care in India due to shortage of doctors in rural areas. Hence, training Village Health Providers (VHPs) is a practical solution to deliver basic healthcare services to rural villages.

To address this problem, Chennai-based for-profit Newdigm Healthcare Technologies Pvt. Ltd launched Amrita Clinical Decision Support System in 2010. It is a mobile-based application that generates recommendations, reminders and alerts to VHPs. Through these suggestions, VHPs can monitor illness symptoms, make better decisions, and provide more adequate treatment to patients. This decision-support system empowers VHPs in delivering maternal care, childcare and care for chronic illnesses.

Established WHO and NRHM guidelines on antenatal, postnatal and child care were used to develop the app which ran in Tamil on JAVA mobile phones and POS devices. After initial trials in the Out-Patients of Stanley Hospital the app was released for a case control study for a period of five months. By using the mobile-based application, VHWS can help in identifying high-risk cases and refer them to a better facility. For instance, if a person has diarrhea and blood in the stools, it could be anything from E.coli diarrhea to shigella dysentery, which would require further tests. The decision support system will classify all of these as 'Dysentery--refer immediately'. It specialises in risk classification intended to triage the patient. The health-provider needs to be trained only once and unless there is a major overhaul in protocols, they only need to update the version of the decision-support from the remote server.

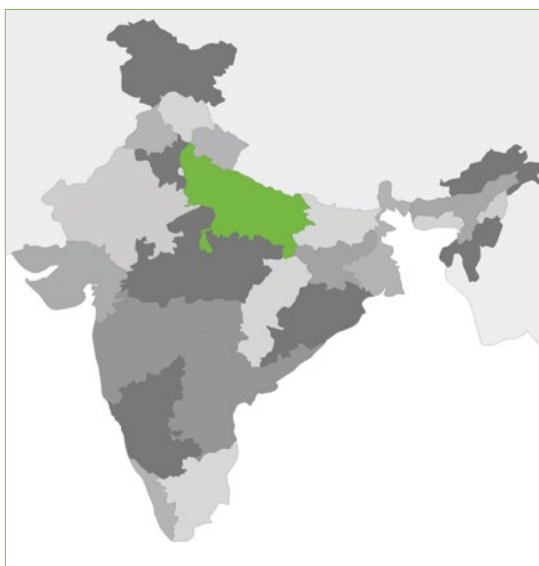
VHPs monitors illness symptoms, makes better decisions, and provides more adequate treatment to patients. This decision-support system empowers VHPs in delivering maternal care, childcare and care for chronic illness



Reach & Road Ahead

National Rural Health Mission of Tamil Nadu funded NewDigm with INR 7,50,000 to develop this model. NewDigm has a 60:40 revenue sharing agreement wherever applicable. When implemented through the government system, NewDigm gets a lump sum upfront. The company has tied up with 15 health care centres in rural Tamil Nadu, Kerala, Madhya Pradesh, Bihar and West Bengal.

This mobile phone based solution can be supported by any Java, Android and Blackberry mobile phone and can be made available in Indian regional languages. The company has also developed back-end analytics, which allow patient data to be routed to a central server. The information is used to generate reminders, alerts and help agencies manage health care delivery better. NewDigm's business model depends on tie-ups with agencies, but this may change in the future.



Mobiles for supporting frontline workers

Reducing Maternal and Newborn Deaths (ReMiND)

Organisation

Catholic Relief Services (CRS), Dimagi and Vatsalaya

Project Location & Coverage Area

Kaushambi, Uttar Pradesh

Project URL

www.crs.org/countries/india

Area of intervention

Health

Monitoring & enhancing health workers' skills

In early 2011, the ReMiND (Reducing Maternal and Newborn Deaths) Project emerged from a partnership between Catholic Relief Services India (CRS/India) and technology innovator Dimagi, Inc. to work with government's community health workers (ASHAs) to reduce maternal and newborn death, and improve maternal health. The objective of the ReMiND Project (2012 – 2015) is to contribute to sustained improvements in maternal, newborn and infant health outcomes in Kaushambi District.

Under this program, ASHAs are provided with basic mobile phones operating Dimagi's open source - CommCare which equips them with multi-media job aids to support client assessment, counseling, and early identification, treatment and/or rapid referral of pregnancy, postpartum and newborn complications. The content includes pregnancy, postpartum and infant referral modules which are aligned with the existing government health department training modules and guidelines for ASHAs, allowing them to quickly adapt the programme, instead of learning new ones. This programme works on a mobile application with five modules to guide the ASHA worker and support the job of ASHA facilitators.

To accommodate ASHAs who may be illiterate, these five modules also provide audio-visual clips to provide health-related guidance to support client assessment, counselling, early identification and treatment and/or rapid referral of pregnancy, postpartum and newborn complications. ReMiND also tracks in real-time and sends out SMS reminders to health workers to conduct regular home visits and postpartum visits. Once a birth is reported, interactive voice response reminders prompt ASHA to conduct a postpartum visit until that visit is recorded.

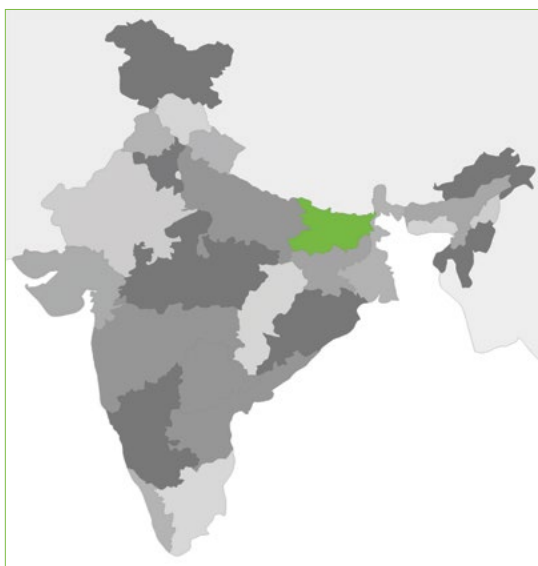
The modules provides audio-visual clips to provide health-related guidance to support client assessment, counselling, early identification and treatment and/or rapid referral of pregnancy, postpartum and newborn complications



Reach & Road Ahead

The application is being used by 259 ASHAs. So far, it has reached 368,276 people in two blocks and has supported 8679 pregnant women and cared for 8189 newborn. The project has helped 71 per cent of the pregnant women receive care during pregnancy, 80 per cent saved money during delivery and 30 per cent received ante-natal care checkups. Improvement in ASHAs' high-impact knowledge of prenatal and newborn care has risen 24 per cent. ASHA's have also reached over 2,700 pregnant women and over 45,000 family members and friends to provide some form of health education.

Following the progress made by using the software with 10 ASHAs in Kaushambi District, CRS got private funds in 2012 to support the start-up of the ReMiND Project with all ASHAs in Manjhanpur block of Kaushambi in partnership with Vatsalaya and with Dimagi. Additional USAID funding awarded to Dimagi helped to support scale-up of ReMiND to a second block Manjhanpur in 2013.



Mobiles for supporting frontline workers

Mobile Academy

Organisation

BBC Media Action

Project Location & Coverage Area

Bihar

Project URL

www.rethink1000days.org/programme-outputs/mobile-academy/

Area of intervention

Health

Life-saving mobile based information services to pregnant women

As per the architectural corrections done in health care service delivery structure under the ambit of NRHM, the community health workers are supposed to play a crucial role in delivering health care information and service delivery to the last mile. But most of the health workers are not adequately skilled and educated. Their capabilities also get limited by the remoteness from the centres of learning and their own financial status. This gets between the commitment of the community health workers to play role in reducing the maternal and child mortality rates.

BBC Media Action has developed a training course, called Mobile Academy with a support from Bill & Melinda Gates Foundation to reduce child mortality, improve maternal health and reduce infectious diseases in Bihar, India. Mobile Academy is an audio training course delivered over mobile phones to frontline community health workers (CHWs) to expand and refresh their knowledge of nine life-saving health behaviour, and to enhance their communication skills.

The training material is delivered all across Bihar via Interactive Voice Response (IVR) – a technology that can be accessed from any mobile handset. A health worker can take the course by dialing a short mobile number from any mobile handset. The course is delivered in the voice of an engaging yet authoritative female doctor character named Dr Anita. It consists of nine chapters, 36 lessons and nine quizzes covering nine life-saving behaviorus Health workers receive an accumulative pass or fail score at the end of the course; they can repeat lessons, chapters and quizzes as many times as they like.

Reducing child mortality, improving maternal health and reducing infectious diseases in Bihar

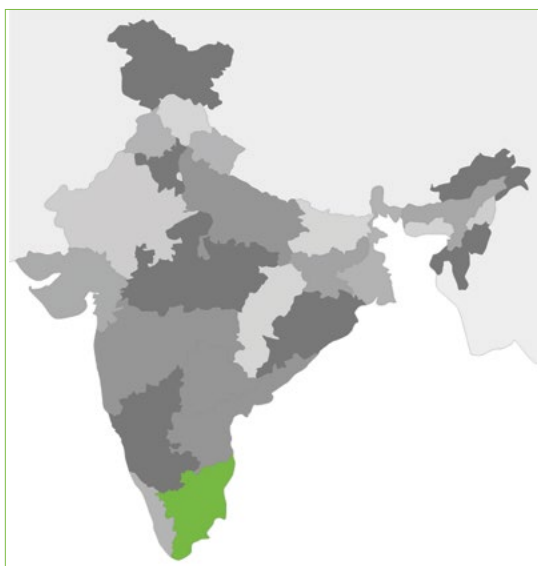


Health workers can take the course as quickly or slowly as they like. Bookmarking technology remembers where they were when they last hung up, and returns them to this place when they dial again. If they complete the course with a 50 per cent pass mark, they receive a printed certificate from the Government of Bihar.

Reach & Road Ahead

After it's launched in June 2012, till March 2015 as many as 70,245 unique users have accessed the course of which 40,385 CHWs have completed the course. Bihar has a total of 2,00,000 CHWs. The course is helping dramatically in improving CHW's interpersonal skills while overcoming problems of limited access of CHWs to training centres due to remoteness, financial status or family obligations.

The training course focusing on maternal and child health has been developed by BBC Media Action, the international development charity arm of the BBC, UK and is being implemented under the Ananya programme of the Bihar government in partnership with Bill and Melinda Gates Foundation. Health workers pay for the 160 minute course themselves. In less than one cent a minute, the total cost is approximately \$1.50.



Mobiles for supporting frontline workers

Adivasi Tea Leaf Marketing (ATLM) paperless workflow

Organisation
ACCORD

Project Location & Coverage Area
Gudalur, Tamil Nadu

Project URL
www.aidivasi.net

Area of intervention
Empowerment

Paperless workflow for adivasis

In 1999,AMS established the Adivasi Tea Leaf Marketing Society (ATLMS) to empower Adivasis to better market the produce from their tea leaf plantations. ATLMS buys fresh leaf from individual Adivasis and sells to processing companies to ensure better prices and avoid exploitation of individual planters.

In 2012,ATLMS, which used to work with paper receipt books and registers, successfully implemented a mobile app for processing the orders and ingesting them into the database in a paperless workflow. The entire solution was designed, tested and rolled out by an all-Adivasi team using the Open Data Kit.

The use of mobile technology reduced unnecessary paper work and human errors during the data collection from field to office by ATLM workers. People use mobile tablets to enter data in the system, which records the kilos of tea, member name, member code etc. at the time of tea bags collection from ATLM members at village. The data saved to the app is sent to the system through Wifi connectivity to keep a record of the process. The entire mechanism is now being managed through mobile application.

The main purpose of the project was to demonstrate that with a little support and capacity building, communities can harness their own imagination and will to effect positive change. The AMS and ACCORD strive to empower the Adivasis of the Nilgiris, rather than provide them with ready-made solutions.

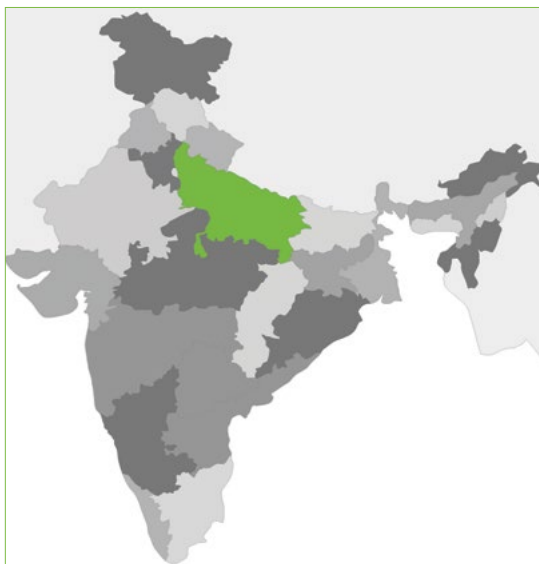
A mobile app for processing the orders and ingesting them into the data-base in a paperless workflow



Reach & Road Ahead

Today, AMS is the political voice of the Adivasi community in Gudalur valley and it has more than 12,500 members spread across more than 200 villages in the Gudalur and Pandalur taluks of the Nilgiris district in Tamil Nadu.

By putting the reins in the hands of the Adivasis right from the beginning, this project was born sustainable. The project has grown quickly and rapidly with little heavy-handed intervention on the part of AMS. By delegating even duties such as training to the Adivasis, the programme has achieved a level of adoption that usually requires far more extensive hand-holding.



Mobiles for supporting frontline workers

mSakhi

Organization

Intrahealth International

Project Location & Coverage Area

Uttar Pradesh

Project URL

www.msakhi.org

Area of intervention

Health

Video-guided mobile application to support ASHAs

MSakhi is an interactive vernacular audio/video-guided mobile application that provides support to ASHAs in conducting routine activities across the continuum of MNCH care. MSakhi content is based on the NRHM ASHA manuals and home-based newborn care (HBNC) guidelines and formats.

The Manthan Project initially developed MSakhi on the open-source CommCare platform using java-enabled, keypad-based mobile phones. Based on ASHA and beneficiary feedback for more intuitive and multimedia-enabled applications, the project modified MSakhi for touch-phones using an open-source Android platform.

ASHAs register pregnant/lactating women and children up to six years by entering basic information such as name and village into MSakhi during home visits. Upon registration, MSakhi generates a home visit schedule for each participant and provides a set of audio-video guided instructions for counselling, assessment, and referral specific to each visit. The ANMs receive the data entered by ASHAs into MSakhi, and the data is stored in the MSakhi central database, allowing for real-time tracking of both ASHAs and participants.

The database is designed for seamless integration with existing government information and communication technology (ICT) systems such as the Mother-Child Tracking System (MCTS) and the Health Management Information System (HMIS). This integration has the potential to save time and reduce delays.

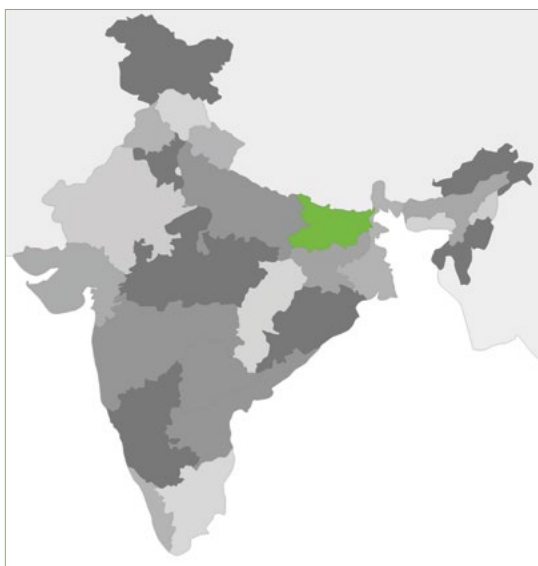
Generates a home visit schedule for each participant and provides a set of audio-video guided instructions for counselling, assessment, and referral specific to each visit



Reach & Road Ahead

The number of ASHAs who recognized fewer than two danger signs in prenatal, delivery, and postpartum maternal and newborn care decreased from 13 to 2. Five ASHAs could identify six or more danger signs compared to only one at baseline. Qualitative data also indicated that after using the tool, the ASHAs were more confident in their abilities, felt they were seen as more credible among their clients, and offered better counselling during home visits.

In the State of Uttar Pradesh, Intra Health is helping the Department of Family Welfare test the effectiveness and scalability of innovations that have the potential to improve the health of mothers and newborns, including improving the performance and impact of ASHAs.



Mobiles for supporting frontline workers

Mobile Kunji

Organisation

BBC Media Action

Project Location & Coverage Area

Bihar

Project URL

www.rethink1000days.org/programme-outputs/mobile-kunji/

Area of intervention

Health

An interactive voice response (IVR)-based mobile service

The problem of high rate of maternal and infant mortality rate is a pressing issue in India, and Bihar ranks the lowest on these indicators. Bihar has a huge population of 104 million people, including 25 million women of childbearing age. There are about two lakhs grassroots community health workers in the state; each responsible for a catchment area of 1,000 people. The reasons behind high incidences of infant and maternal mortality rates in India are the lack of awareness among women about the importance of antenatal care (ANC) and postnatal care (PNC), inadequate infrastructural as well as medical facilities and assistance during delivery, incomplete immunisation, most of these because of shortage or under-utilization of the health workforce.

Mobile Kunji is like an aid on maternal and child health designed to be used by Community Health Workers during their counselling sessions with women and their families. Mobile Kunji comprises of an Interactive Voice Response (IVR)-based mobile service and a printed deck of cards on a ring. A unique short-code at the bottom of each card plays the related audio health message to rural families.

The recorded voices of Dr Anita or her assistant Nishant Kumar provide further information during the call. The health worker can convey that information to the family and the family members can also listen to it themselves. This service can be used on any mobile handset, and is available on common tariff across all the six participating operators. The solution serves as a mean to disseminate information, guide the women and families, and may be used as a ready reckoner by the health worker as well.

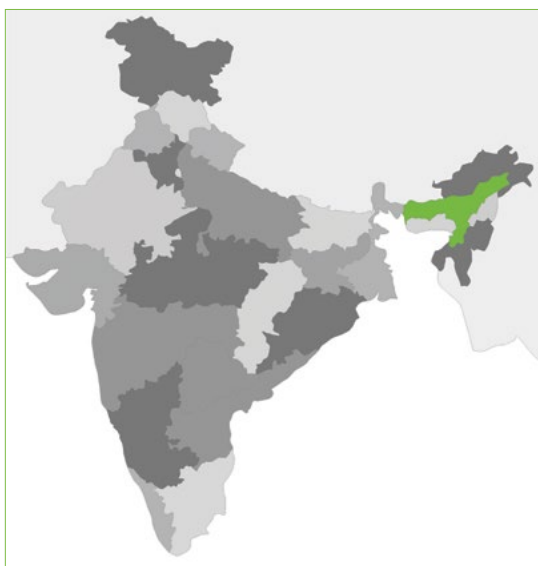
An aid on maternal and child health designed to be used by community health workers during their counseling sessions with women and their families



Reach & Road Ahead

As per the claims by BBC's international NGO arm, BBC Media Action, over 1.30 lakh users were registered and they accessed about 4.28 million minutes of content on Mobile Kunji. It has apparently helped the health workforce on the ground to convey the message in a more convincing manner to the families. The health workers can easily convey the message now to a large number of families.

Early analysis by the BBC Media Action concludes that exposure to Mobile Kunji adds substantial value in predicting behaviour and is strongly correlated with delivery preparation and complimentary feeding; and serves as a good complement to other job aids and tools used by frontline workers. The call costs are expected to be covered by the government of Bihar. Additional revenue streams including advertising will make services commercially viable in the longer term.



Mobiles for supporting frontline workers

Chetna

Organisation

Department of Design (DoD), IIT Guwahati and Embedded Interaction Lab (EILab)

Project Location & Coverage Area

Assam

Project URL

<http://chetna.info/>

Area of intervention

Health

TV based information system to educate pregnant women

India continues to contribute about a quarter of all global maternal deaths with Assam being the highest contributor of 407 maternal death per 1,00,000 live births. Educating women about pregnancy issues, pregnancy complications, health care and raising their awareness can play a vital step in reducing maternal and child death as well providing safe and healthy motherhood.

‘Chetna’, an interactive information system to educate pregnant women, is a collaboration of IIT-G and IBM Research with support from the National Rural Health Mission (NRHM), Assam. Chetna is a body gesture enabled TV based information system to educate pregnant women in rural Assam.

The Chetna project uses Microsoft’s Kinect as a means to provide a Natural User Interface. The backend was coded in C# utilising Microsoft Kinect SDK 1.7. The module is started when the user calls a particular phone number. The system is serially connected to a phone which then cuts the call and obtains the user’s phone number through caller ID. Throughout the system, the user is identified through her phone number. Various gestures that have been implemented include ‘select’, ‘pause’, ‘resume’, ‘next’, ‘previous’, ‘main menu’ and ‘help’ These are mapped with different functions to help the user in navigation and control of the interface.

Contextual & customised audio visual animation (through traditional Assamese home environment) is used to communicate maternal healthcare information in local language. Information such as symptoms

Educating women about pregnancy issues, pregnancy complications and health care to reduce maternal and child death as well as providing safe and healthy motherhood



and recommendations, food habits and tests and checkups are provided to users.

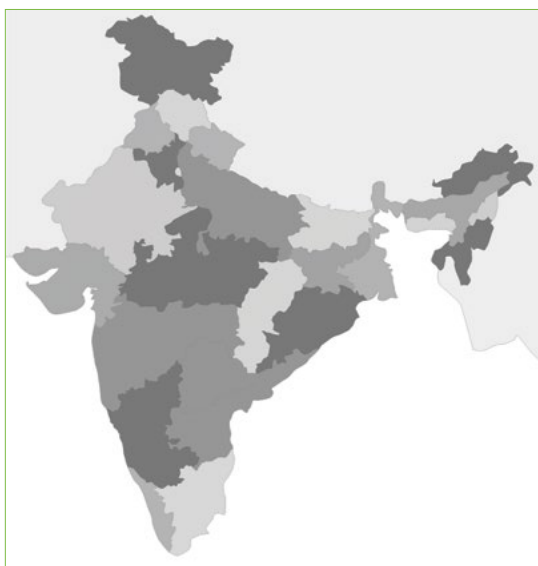
Chetna also provides an interface to remotely connect with doctors and help them answer their queries. Unique identification number is provided to each health device, which helps each pregnant women avail all government services during migration. This information is context specific and provided in Assamese language through an easy audio visual interface.

Reach & Road Ahead

This system is proposed to be deployed at health centers where pregnant women often come for routine checkup. It is mainly designed for pregnant women from low socio-economy, low literacy background and no knowledge of technological interventions such as mobile phones and computers.

In addition to body gesture operated system, it also allows body-centric features where touching a body part triggers information specific to that body part (similar to when we go and show to the doctor in real life). e.g., touching the stomach will trigger stomach + pregnancy related information.

The project, 'Chetna' will be introduced at Bonmoja mini primary health centre at Changsari near the city as a one-month pilot study.



Mobiles for supporting frontline workers

Tutor on Mobile

Organization

Tata DOCOMO & Voicetap Technologies

Project Location & Coverage Area

Pan India

Project URL

www.tatadocomo.com/mobile-tutor.aspx

Area of intervention

Education

Learning on mobile anytime, anywhere in India

In India, there are more than 700 million mobile phones, but only about 100 million have access to the internet –learning content, therefore, needs to be provided in different forms.

Tata Docomo and Voicetap Technologies launched Tutor on Mobile (TOM) for those who want to learn and acquire knowledge with experts in India using mobile phones but not be limited to internet.

Users access the content using various mobile features such as WAP (Wireless Application Protocol), IVR, SMS, video, etc. Users can use any phone for using this service. Users who don't have internet access, they can simply use voice or SMS based platform and directly interact with experts. SMS and voice traffic is managed through a shortcode series, 5333300.

While users from other operators can also use the voice service using 10 digit MSISDN. People who have internet access can use the WAP portal and access content in form of videos, explanation notes, mock tests, college database, etc. People can create their IVR profiles and talk to experts. Users can receive alert on SMS and WAP for voice content on IVR. Moreover, they can also use text-based explanation on specific topics and contexts.

The most frequently accessed areas include career counselling, advice on entry into various job markets and support relating to the All-India Engineering Entrance Exam (AIEEE) in the form of videos which provide guidance for entering the National Institute of Technology and Vedic Maths. Some seasonality has been experienced around MBA courses and schools.

Users access the content using various mobile features such as WAP, IVR, SMS, video, etc.

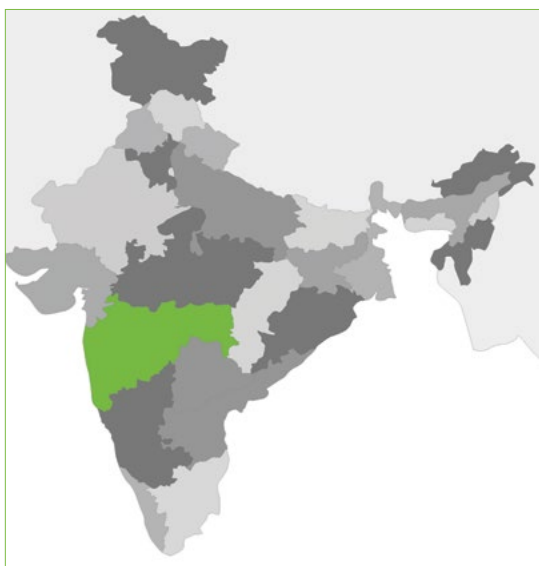


Other SMS content such as 'TalkSmart', a service which helps people learn professional vocabulary, has remained popular all year around.

Reach & Road Ahead

Since its launch in September 2011, users have accessed over 1.5 million pieces of content in various forms and the service currently has more than 2,00,000 active users. Till date, users have age between 15 years and 24 years.

The learning content is aggregated from over 75 content providers and it remains accessible to the user until their subscription expires. Users can purchase content items from INR 2 -INR 10 for video demonstration or as part of a pack that contain 30 videos ranging from English to music. The strength of TOM is that it is based on a self-sustaining business model. The knowledge provider generates revenue by providing learning content; the operator generates revenue by the use of the service; and the seeker of knowledge gains what they want at a nominal charge. Where conferencing is used, the expert taking part receives a percentage of the fee generated by TOM. When a video is viewed, the creator earns a percentage of the revenue.



Mobiles for supporting frontline workers

Mobile Sakhi

Organisation

Lata Medical Research Foundation & CommCare

Project Location & Coverage Area

Nagpur, Maharashtra

Project URL

<http://latamedicalresearchfoundation.org/>

Area of intervention

Health

Maternal and child health app

The Mobile-SAKHI application is a Maternal and Child Health app that enables tracking women in their third trimester of pregnancy till 6 months of infant age. Mobile Sakhi is a collaborative effort of Lata Medical Research Foundation and CommCare that aims to collect data, monitor and evaluate antenatal and postnatal care and infant nutrition up to 6 months in a rural setting of Central India. Along with Baby Friendly Hospital initiative (BFHI), the project promotes appropriate breastfeeding practices and timely initiation of complementary feeding, child growth and reduce morbidity in infants. This application has been designed to collect data, provide visit reminders for improving compliance, play audio files in regional language so that health worker and mother can understand the questions and health messages for desired behavior change in, pregnancy spacing, maternal diet, early iron and folic acid supplementation, immunization and appropriate IYCF practices.

This project entails early identification of any maternal or infant illnesses, their causes and care received from the health facility; health messages for mothers to improve breastfeeding practices, nutrition, family planning, gender equality etc. The application was designed and was deployed on Nokia C2-01 J2ME phones in Marathi language. The visit schedule comprises of eight visits by the ASHA worker at the following time points: Two visits in the antenatal period (third trimester of pregnancy), one visit within 24 hours of delivery, subsequent post natal visits at 1.5, 2.5, 3.5, 4.5 and 6 months.

Entails early identification of any maternal or infant illnesses, their causes and care received from the health facility; health messages for mothers to improve breastfeeding practices, nutrition, family planning, gender equality etc.

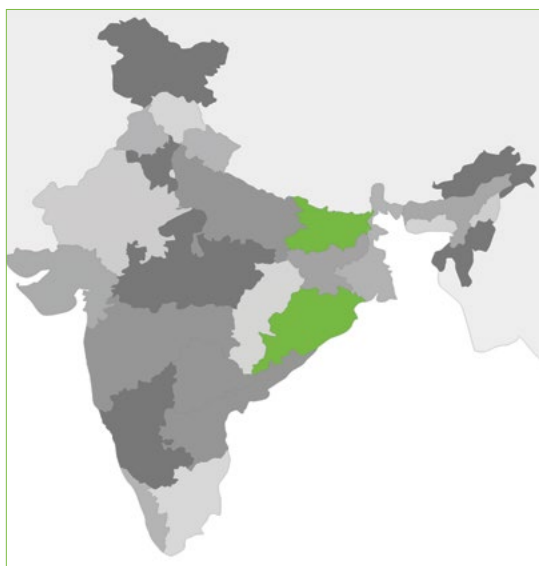


The application is divided into four modules, namely, 1) Mother Registration 2) Maternal Information 3) Child Registration and 4) Child Information. These modules were created to minimize any confusion while data collection. Tele-counselling is provided by locational counsellors (LCs) with a diploma in nursing, trained by authorized trainers. The beneficiaries receive short messages in local language to promote breast feeding, improve compliance and scheduled weekly calls.

Reach & Road Ahead

A population of 3,12,43,350 of which 1,036 women are registered in this project from the slum around Central Avenue, Itwari, Mahal and Sitabuldi areas of Nagpur city. LMRF's Mobile Sakhi trial began in Takalghat, Nagpur district and registered 80 pairs of mothers and infants in both a CommCare cluster and a control cluster, respectively.

LMRF has plan to scale up the Mobile SAKHI Project to all primary health centers in Takalghat, equipping each of the FLWs with a mobile tool. The organization is also looking forward to slowly and systematically rolling out this programme for their ongoing Maternal and Newborn Health (MNH) Registry. Amidst these plans to scale, LMRF also hopes to continually leverage the CommCare platform by adding health videos for improving delivery of IMNCI services in the villages.



Mobiles for supporting frontline workers

Project Ujjwal

Organisation

GRM Futures Group & DFID

Project Location & Coverage Area

Bihar and Odisha

Project URL

www.projectujjwal.com

Area of intervention

Health

A mobile app for improving maternal & newborn health

Project Ujjwal ('Improved Family Planning and Reproductive Health Services in India') is a part of the UKaid Framework for Results to improve reproductive, maternal and newborn health in the developing world. Project Ujjwal is being implemented by a consortium led by Futures Group in partnership with Public Health Foundation of India (PHFI), Hindustan Latex Family Planning Promotion Trust (HLFPPT), Johns Hopkins University Center for Communications Programs, and Oxford Policy Management (OPM).

The project aims to reduce maternal deaths from unwanted pregnancies by increasing use of family planning methods, improving birth spacing practices and preventing unsafe abortions in Bihar and Odisha. Futures Group and PHFI have jointly developed a web and mobile based platform that provides interactive based learning materials for couples who are interested in knowing more about family planning and reproductive health services, and fertility.

PHFI developed the technical content in collaboration with FOGSI and GRM Futures Group provided instructional learning and information and communication technology support. The course has been designed for wider use and not restricted to project doctors and health managers. It provides opportunities to medical practitioners and health managers to update their knowledge on FP/RH and virtually interact with FOGSI doctors for questions/queries. The mobile app is capable to run on any android mobile phone / tablet with Android 2.2 or higher version. This application requires internet connection to take test and update user information.

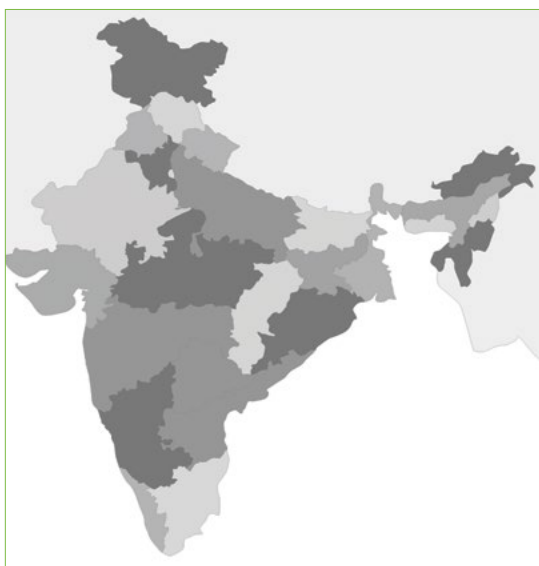
Reducing maternal deaths from unwanted pregnancies by increasing use of family planning methods, improving birth spacing practices and preventing unsafe abortions in Bihar and Odisha



Reach & Road Ahead

Over 300 users have logged in and are using the course since June 2014. The course has had over 800 hits. The users comprise of an equal mix of medical and non-medical people interested in family planning issues. Through its network of 280 plus private providers and 6000 community health volunteers in Bihar and Odisha, the project is expanding the choice of sites for provision of quality FP and safe abortion services. The Project has a network of 84 clinics in Odisha for providing high quality family planning services with affordable prices as a supplement to the state government efforts for strengthening family planning services in Odisha.

Existing qualified private sector providers (doctors) at the district and block levels have been networked using fractional franchising principles and linked within a referral network to provide quality family planning and reproductive health services.



Mobiles for supporting frontline workers

HealthPhone

Organisation

IAP, MWCD, UNICEF & Vodafone

Project Location & Coverage Area

Pan India

Project URL

<http://iap.healthphone.org>

Area of intervention

Health

Mobile-based personal video library for mothers

Today, nearly every second child in India is a victim of malnutrition. It means they are physically and mentally weak due to which they are targets of many ailments, deformities, disabilities and allergies affecting normal growth mentally and physically.

IAP HealthPhone is a mobile-phone-based personal video reference library and guide to better health and nutrition practices, for families and communities. The videos can be pre-loaded on a microSD memory card to insert in basic mobile feature phones and have been created specifically with the illiterate in mind and in their language.

The videos named under Poshan series have been developed by UNICEF & WCD to aim six million girls and women aged between 13 to 35 years by the year 2018. These videos are available in 18 languages. The Poshan videos address issues of status of women, the care of pregnant women and children under two, breastfeeding and the importance of a balanced diet, health and simple changes in nutritional care practices that can notably enhance nutrition levels.

Thus, mothers, pregnant women have direct access to knowledge, in rich multimedia, to learn, share, educate others and use at the time when they need to deal with a health problem, where they are, and as they are, without a connection or cost. Presently, the programme is equipping AWWs, ASHAs and ANMs with a HealthPhone microSD card, containing a library of videos, to enable them to share health & nutrition knowledge with women, families and the communities they serve.

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Reach & Road Ahead

To kick start the programme, IAP has forged a unique partnership with Vodafone India to encourage the viewing of the four videos. Vodafone will enable its customers to view/download the videos free of data charges and on viewing the 4 videos, the user will receive a talk time incentive of INR 10.

Vodafone will send out approximately 300 million text messages to its subscribers every year to promote the viewing of the four videos. It will also support IAP to undertake a comprehensive communication campaign to promote the IAP HealthPhone programme across the country via print and social media. IAP HealthPhone is expected to benefit the health of 60 million children in India born by 2025. In the next step, the programme will also partner with social media giants (such as Facebook, Twitter and Google) to use their exponentially growing channels to reach more - rural and urban – caregivers.

SUMMING UP

The overview of case studies above provides a diverse experience and perspective of using the mobile space for social and behavioural needs in varied contexts. The challenge is to scale up these innovations and success stories for greater social and economic impacts. The challenge going forward is to ensure that mobile practices and innovations benefit all Indians, including the poor and vulnerable, and those living in inaccessible areas.

As it has been observed, there remain vital challenges towards sustaining the pilots and scaling up the same. Issues in improvisation of mobile projects included – technology and platform feasibility, real time data collection, database management and data usage for course correction, local language support, two way communications and response system, community ownership and engagement, IVRS integration, project customisation, and others. Issues in scalability included collaborating with diverse set of agencies, business model with low investment, collaboration with government nodal agencies, flexible source of funding, wider advocacy and education programmes, effective sales and marketing, and project cost design and management. The project sustainability is the overall concern in the medium and long term which requires policy support like priority grants and subsidises, and investment in priority areas like rural based projects. It is strongly felt that a robust and working multistakeholder partnership among parties will help to identify and replicate pilots with improvisation and better operation and sustainability model.

With cautious approach and learning from the pilots and limitations therein, the scope to scale up the pilots is wide with higher success ratio. At policy and programme support level the ideas of – corpus fund to support civil society agencies on mobile for SBC projects, a consortium of mobile for SBCs, an incubation platform to support innovations – must be considered on priority basis.

For more copies contact:

Communication for Development Section
United Nation Children's Fund
73, Lodi Estate
New Delhi - 110003
India

Tel: +91 11 24690401

www.unicef.org
www.unicef.org/india/
www.unicefec.org

Digital Empowerment Foundation
House No. 44, 2nd & 3rd Floor (Next to Naraina IIT Academy)
Kalu Sarai, (Near IIT Flyover)
New Delhi - 110016
India

Tel: 91-11-26532786 / Fax: 91-11-26532787

def@defindia.net
www.defindia.org