ICT4D: PROJECTS, BEST PRACTICES AND RESOURCES **REPORT**

Articles

- Failed ICT development projects: Sweeping it under the carpet and moving on?
http://vulnerabilityandpoverty.blogspot.com/2012/12/by-inka-barnett-use-of-information-and.html
Explains reasons for failure, provides links to information on ICT4D failures reports.

- Starting an ICT4D project? Try these questions first.
http://ajuonline.net/blog/?p=702
Article on best practices for the development of ICT4D projects.

- Using SMS to Strengthen Community Communications in the Democratic Republic of the Congo
https://bestict4d.wordpress.com/2013/06/27/using-sms-to-strengthen-community-communications-in-the-democratic-republic-of-the-congo/
Article on the impact of SMS in community communications in Congo, particularly members of a Methodist Church.

The Role of Mobile in Development: An Interview with Priya Jaisinghani, Mobile Solutions Director at USAID
https://bestict4d.wordpress.com/2013/06/18/the-role-of-mobile-in-development-an-interview-with-priya-jaisinghani-mobile-solutions-director-at-usaid/
Articule on best practices and examples of projects around the world.

Failure Report

- Engineers Without Borders, a Canadian NGO, publishes a yearly list of failed ICT projects, as means to provide lessons of do´s and dont´s.
http://legacy.ewb.ca/en/whoweare/accountable/failure.html

Journal Article

- Short Message Service (SMS) Applications for Disease Prevention in Developing Countries
http://www.jmir.org/2012/1/e3/
This review illustrates that while many SMS applications for disease prevention exist, few have been evaluated. The dearth of peer-reviewed studies and the limited evidence found in this systematic review highlight the need for high-quality efficacy studies examining behavioral, social, and economic outcomes of SMS applications and mobile phone interventions aimed to promote health in developing country contexts.

General Resources

- mHealth Evidence
http://www.mhealthevidence.org/
"mHealth" is the use of mobile information and communication technologies for improving health.

mHealthEvidence.org was designed to bring together the world's literature on mHealth effectiveness, cost-effectiveness and program efficiency, to make it easier for software developers, researchers, program managers, funders and other key decision-makers to quickly get up to speed on the current state-of-the-art. It includes peer-reviewed and grey literature from high-, middle- and low-resource settings.

- SPIDER
https://spidercenter.org/about
Provides funding for ICT for Development projects:

The Swedish Program for ICT in Developing Regions (Spider) is a resource center for ICT for Development (ICT4D). Spider was established in 2004 and is based at the Department of Computer and Systems Sciences (DSV) at Stockholm University. Spider is primarily financed by the Swedish International Development Cooperation Agency (Sida).

Examples of Spider-funded programs

Education

Mobile Online Learning for Human Rights

Reforms through citizen participation and government accountability

Period: July 2012 - December 2012

The primary idea with this project is to explore how smartphones that utilize native applications and mobile web applications can be used to enhance the quality of life and learning situation for Kenyan citizens. Specifically for this Spider research area, we will provide a course in Human Rights through a mobile Moodle client so that the participants can learn about human rights and democracy for free via a smartphone. This course can be accessed and studied freely by any Kenyan with access to a smartphone or other form of Internet connected device (e.g. tablet, PC, etc.). Furthermore, the course intends to offer an open badge, i.e. (https://wiki.mozilla.org/Badges) that can be seen as a form of "digital diploma" so that Kenyan citizens have "proof" of studying the course.

Health

ICT4MPOWER: ICT for Medical Community Empowerment

The project objectives are:

- Improve the information flow from the community to the district and the regional levels of the health care system. This should empower rural healthcare communities, for better health outcomes for the rural population in Uganda using information and communication technology (ICT).
- Develop a visual tool for the doctor to see what stage the patient is in, what side effects they have towards drug treatment etc. A doctor can in a short amount of time, without looking at hundreds of papers or asking nurses, look at that information on a patient from the digital records and make the decision to change drug treatment.
- Transfer patients' records to a digital system that should be able to provide the history of treatment to a patient.
- The Electronic Health Record System is important for generating: - Accurate client traceable records. - Data that allows tracking of indicators at all levels - Monitoring for prevention and control of diseases of epidemic potential
- Child Health Application: There is a need for better vaccination management in rural areas. The clinical decision support system will generate a care program for any child registered at any clinic. When vaccination or routine check-up is imminent a message from the system is sent to the community health worker's phone, who visits the parents to remind them of vaccination. These are the community health workers who received mobile phones in 2009 in Ruhira Village, Isingiro District.

Short Message Service (Sms) Interventions For Disease Prevention - List Of Projects:
http://www.jmir.org/2012/1/e3/

Intervention (reference)	Country	Disease	Description	Comments
It begins with you [22]	30 African countries	HIV/AIDS[a]	SMS voting system on what happened on the show, asked viewers to share what they have done to advance an HIV-free generation, and encouraged all Africans to start by knowing their HIV status.	Target: population; status: ended after 1 season
Star Project [23]	6 African countries	HIV/AIDS	Counterpart to India's *Freedom from HIV* project. SMS used for downloading 2 mobile phone games (AIDS Fighter Pilot and AIDS Penalty Shoot Out) to raise HIV/AIDS awareness, deployed on low-end and sophisticated colored devices.	Target: population; technology: ZMQ; specificity: developed English and 2 local languages (Kiswahili and Shen)
Talk Back [24]	Botswana	HIV/AIDS	Weekly television program for HIV prevention, broadcasted live, to stimulate interactivity with teachers and viewers through phone lines, SMS, emails, and letters.	Target: teachers and students
UNICEF[b] [25]	Central African Republic	Measles, malaria, diarrhea	Multimedia campaign used SMS to encourage vaccination, use of long-lasting insecticidal nets, and hand-washing.	Target: parents of young children
Text Me! Flash Me! [26,27]	Ghana	HIV/AIDS	Health education and promotion messages sent to mobile phone numbers collected by peer educators and social networks. Clients who text in "HELP" were referred to live helpline counselors, who called back within 24 hours.	Target group: most-at-risk populations: men who have sex with men and female sex workers
eQuest [28]	Kenya	HIV/AIDS	Contest engaged youth in discussions about HIV/AIDS. Youth sent SMS answers to questions about HIV/AIDS received on their mobile phone, after checking information in a special eQuest column printed in the newspaper.	Target: youth; incentives: airtime, T-shirts, mobile phone, computers, DVD players, and a home theatre system
Makutano Junction [29,30]	Kenya	HIV/AIDS	Soap opera based in a fictitious Kenyan village supported by SMS. Viewers were invited to text in if they needed more information on a given topic.	Target: population
Mobile4Good [31]	Kenya	HIV/AIDS	"My question" allowed customers to anonymously ask HIV/AIDS and breast cancer-related questions and receive answers via SMS. "Health Tips" provided subscribers with useful tips on various pertinent health issues via SMS.	Target: population

Intervention (reference)	Country	Disease	Description	Comments
Afriafya [32]	Kenya	HIV/AIDS	Community resource centers worked with information and communication technology to access various information, including on health, via SMS request or other means of communication. Answer was sent back by email, booklet, or SMS.	Target: rural population; technology: telecenter
Pariah News [33]	Madagascar	HIV/AIDS	Citizen media-enabled project that broadcasted HIV/AIDS message via SMS, Internet radio, and blogs.	Target: sex workers; technology: Ushahidi platform, open source
Health On Line [34]	Mali	HIV/AIDS, malaria	Social marketing campaign that used bimonthly free SMS with health slogans and reference to an interactive sexual health website.	Target: young, urban people (n = 350,000)
Learning about Living [35,36]	Nigeria	HIV/AIDS and SRH[c]	Health promotion and prevention was based on HIV/AIDS, SRH, maternal morbidity, and gender violence with (1) MyQuestion: HIV/AIDS-related questions sent by public via SMS, Web, or hotline, answered by trained counselors, (2) MyAnswer: prizes won by texting correct answer to a quiz.	Target: young people; incentive: airtime; scaleup: in existing and new states
RapidSMS [37]	Nigeria	Malaria	SMS helped deploy bed nets by (1) tracking commodities from state stores to distribution points by monitoring coupon distribution, (2) sending SMS reminders about distribution times and location for beneficiaries.	Target: population; technology: RapidSMS (UNICEF innovation); license: open source
Beat It [38,39]	South Africa	HIV/AIDS	Free SMS to enter the draw for prizes that motivated people to check results on *Beat I t* television program. Designed to promote positive living, treatment access, and HIV infection prevention.	Target: youth; technology: Cell-Life; incentives: mobile phone, airtime
Cell-Life [40,41]	South Africa	HIV/AIDS	Mass messaging for prevention, linking clinic and patients to peer-to-peer support and counseling at no charge, through a computerized capture of mobile phone number and automatic SMS back with the information.	Target: patient; technology: Cell-Life; license: open source; multicomponent project; status: ongoing
Project Masiluleke [42,43]	South Africa	HIV/AIDS	Project provided several mobile phone-based applications for HIV/AIDS care: “Access Information” and “Get Tested”. Health promotion messages broadcasted in unused space of “Please Call Me,” a free form of SMS widely used in Africa.	Target: population; technology: SocialTxt from Praekelt Foundation;

Intervention (reference)	Country	Disease	Description	Comments
				license: open source; multicomponent project compliance
South African Depression and Anxiety Group [44]	South Africa	Mental health	National toll-free suicide helpline and SMS for adolescents in crisis.	Target: young people; status: ongoing
Digital mosquito net vouchers [45]	Tanzania	Malaria	Implemented long-lasting insecticidal net distribution using SMS voucher system for controlling counterfeited voucher.	Target: pregnant women
Kimasomaso [46,47]	6 African countries	SRH	Radio program transmitted voices of young people keeping audio diaries, associated with helpline. Also provided SMS to redirect callers and text senders to local support.	Target: young people
AppLab [48]	Uganda	HIV/AIDS, SRH	Leveraged existing Village Shared Phone Operators to deliver mobile information services in health and agriculture with (1) SMS-based health tips and searchable database, (2) “Clinic Finder”, to locate nearby health clinics and services.	Target: population; technology: AppLab applications
Text to Change [49-51]	Uganda	HIV/AIDS	Interactive SMS quiz designed to help resolve key issues around HIV transmission and prevention, in the form of a multiple choice questionnaire that guaranteed free voluntary counseling and testing services to participants who answered correctly. Three quizzes offered weekly in English.	Target: population (15,000); incentives: voluntary counseling and testing services, airtime and mobile phone; status: ongoing, plan for Uganda and other African countries
UNICEF [52]	Zimbabwe	Cholera	Nationwide SMS information campaign during larger cholera campaign.	Target population
China Netcom [53]	China	SRH	SRH education and awareness campaign with SMS and hotline that gave access to medical experts.	Target: population and teenagers
SARS[d] education	China	SARS	Mobile phone subscribers could call an SMS that alerted them if they were within 1 km of a SARS-infected building, where	Target: population; license:

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[54,55]			confirmed cases existed, and about news updates.	proprietary, mobile operator
Indonesia: Community Based Avian Influenza Control Project [56]	Indonesia	Avian influenza	SMS-based contest to encourage travelers in buses to be careful and to test their knowledge on the diseases.	Target: population; incentives: airtime
Condom Condom Campaign [57,58]	India	HIV/AIDS	Condom use promotion and HIV/AIDS awareness campaign among young men with (1) SMS opinion to vote on HIV/AIDS issues, (2) condom-themed mobile phone ringtone using SMS to get a push in reply, from where the user could download the ringtone.	Target: men; incentives: mobile phone and free talk time
Freedom HIV/AIDS [59]	India	HIV/AIDS	SMS used for (1) downloading mobile phone games to raise HIV/AIDS awareness, deployed on low-end and sophisticated colored devices, (2) announcement of radio shows on HIV/AIDS, (3) information on the nearest HIV testing center.	Target: population; technology: ZMQ; specificity: developed in local languages
Heroes Project [60,61]	India	HIV/AIDS	Multiple media channels including SMS to get key messages on HIV/AIDS out to the general public.	Target: population
Indian tuberculosis campaign [62]	India	Tuberculosis	Public awareness campaigns used SMS for tuberculosis information.	Target: population
Breast cancer awareness [63]	India	Cancer	SMS as reminder to conduct breast self-examination.	Target: working women in private companies
Global Hand-washing Day/UNICEF [64]	Nepal	Diarrhea	Public awareness campaign used SMS to encourage hand-washing.	Target: population
Mobilink [65]	Pakistan	Polio	Broadcasted millions of SMSs to encourage parents to get their children vaccinated against polio.	Target: parents; specificities: initiative of services provider
Sex-Ed Text [66]	Philippines	SRH	Computerized system using SMS to receive and then return the keyword of interest for getting complete and free information.	Target: young people

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CardioNet [67]	Mexico	Cardiac diseases	Public prevention campaign in which users took a quick cardiac assessment screening by SMS.	Target: population; technology: Voxiva; license: proprietary