Building Relationships for Designing Rural Information Systems

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Designing Rural Information Systems

Three billion people live in the developing world, many of them in rural areas.

They have many of the same information needs that we do, but with different constraints:

- Limited purchasing power
- Lack of infrastructure (power, communications, shelter, transportation)
- Limited education
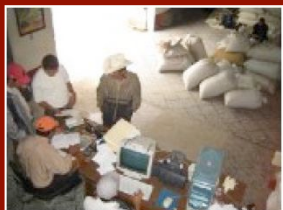- Limited economic opportunities

Overview

- Our Partners: Asobagri, Mahalakasm
- Guidelines:
  - Establishing Rapport
  - Designing Relevant Solutions
  - Overcoming Evaluation Challenges
- Overview of Projects

Our Partners

- Mahakalasm: SHG Federation
  - 6 year relationship
  - MIS (Management and Information System)
    - Used by 17 users to serve over 10,000 people
- Asobagri: Coffee Cooperative
  - 2 year relationship
  - ICS (Internal Control System)
    - Has been piloted in Mexico and Guatemala, and is planned for deployment in Spring 2008

Building Relationships

Establishing Rapport

Designing Relevant Solutions

Overcoming Evaluation Challenges

Establishing Rapport

"show you are tough"

"show you are capable"

Establishing Rapport

"set clear goals"

"be willing to help however you can"

Establishing Rapport

"being local"

"show you care"

Designing Relevant Solutions

"Listen"

"Identify local
champions"

Overcoming Evaluation Challenges

"At first, be patient
and flexible"

Overcoming Evaluation Challenges

"Conduct experiments that are relevant for participants"

"Balance control and enthusiasm"

Overcoming Evaluation Challenges

"Use accumulated social capital to achieve better testing conditions"

"Take compliments with a grain of salt"

Overview of Projects

- Mahakalasm MIS
- Digital ICS
- e-IMCI
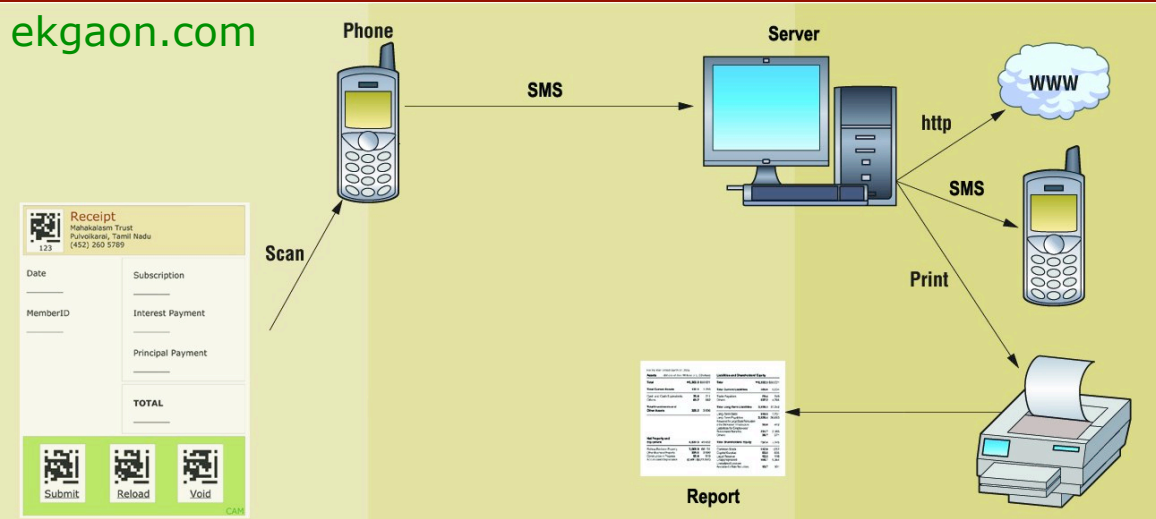- Social Science Projects (Jenna Burrell)

Mahakalasm MIS

Framework for SHG data collection and reporting

Increased transparency within SHG

Improved documentation when applying for loans

Provide new services to members (e.g. flexible savings)

Digital ICS

- Internal Control System for certified coffee
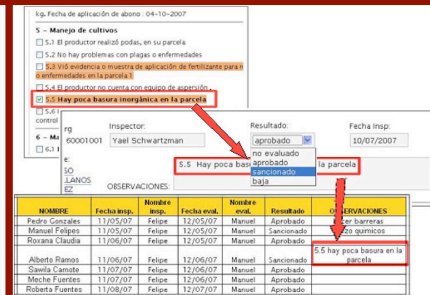- Allows cooperative to manage quality, certifications

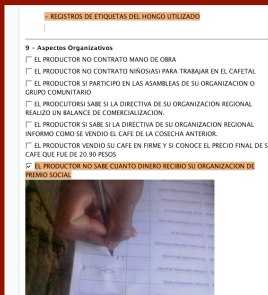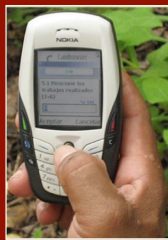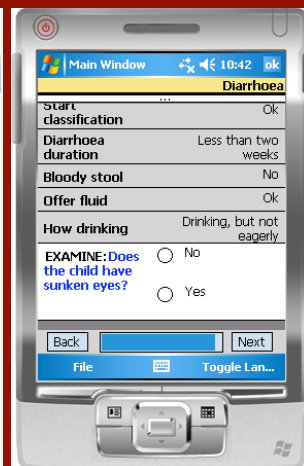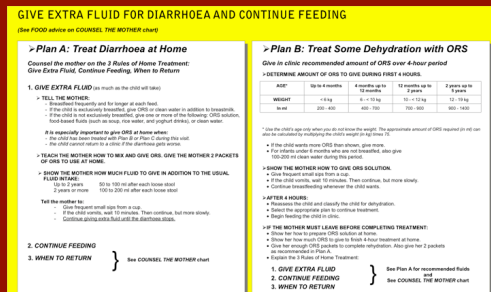| Inspection	Evaluation	Report Generation
Internal Inspectors use **mobile phones**	Evaluators use a **web application**	Reports are generated **automatically**

w/ Yael Schwartzman

e-IMCI

- Automating clinical protocols using a mobile device
- Allows for diagnosis and referral of patients
- Providing automated guidance can improve adherence *significantly* (DeRenzi et al., CHI 2008)

w/ DeRenzi, Lesh, Borriello, Mitchelll

Social Science Agenda

Jenna Burrell
Assistant Professor
I-School, UC Berkeley

- study **large-scale ICT diffusion** and its consequences for individuals, families, and societies in sub-Saharan Africa
- evaluate **how socio-cultural processes shape who has access to these technologies** and under what conditions.
- **capture a rich, local commentary** on technology and development issues through extended fieldwork

Social Science Projects

Jenna Burrell
Assistant Professor
I-School, UC Berkeley

- **2007-2008**: research on mobile phones and livelihoods at rural sites in Uganda
- **2007:** local production and international circulation of family videos by urban, middle class Ghanaian families
- **2004 to 2005:** 8-month ethnographic study of Internet cafe use in Accra, Ghana
- **2004:** technology and transnationalism - Ghanaians living in London

Other work in Brazil and on Indian transnationals working in the high-tech industry

Mahakalasm: A SHG Federation

- SHGs:
  - 10-15 people per group
  - 90% women
  - Accumulate savings and provide loans to members
- Mahakalasm ("great vessel"):
  - Located in Natham, Tamil Nadu, India
  - Independent body of approx. 150 SHGs
  - Managed by an elected Board of Directors from SHG membership

Asobagri: A Coffee Cooperative

- Located in Barillas, Guatemala
- Producer / Exporter
- Values:
  Unity, Solidarity, Responsibility, Quality, Equality, Continuous Betterment, Sustainability, Respect.
- Mission:
  - Provide market access
  - Promote education
  - Fair Trade
  - Maintain & respect environment