Strategies (Gyan et al., 2013)

The Problem

In much of rural Africa, a number of problems persist (Boyera, 2008):

- **Relevant content**: Not many content on the Web is in African languages.
- **Access barriers**: This includes
  - **Illiteracy**: Africa is the only continent where more than half of parents cannot help with homework! (a UNESCO report)
  - **Infrastructure**: A lack of it.
- **Global Digital Divide**: Between developed countries and their developing counterparts.

Web Access today is NOT Universal

One use case at a time

Strategies (Gyan et al., 2013)

- **Bottom Up**: Technical solutions must meet local needs. To be contrasted with solutions that are **Top Down**, i.e. “brought in”, already developed and often do not fit in local contexts.
- **Stakeholder Involvement**: Involving as much community participation as possible. Builds trust and user acceptance. The Living Labs approach is helpful here (Akkermans et al., 2011).
- **Agile Requirements Gathering Process**: Involves technology demonstrations, group discussions, etc.
- **Quick Iterative Cycles**: Prototypes of systems need to go through quick cycles such that reported problems are immediately analysed and/or incorporated into existing system to meet end-user needs.
- **Technology Training**: Often the case that end users should be thoroughly trained to be able to use the technical solution. This may sometimes also mean finding buy-in from local developers and skilled entrepreneurs to build an ecosystem for a particular innovation.

A Solution: RadioMarché

- **Motivation**: A use case in rural Mali which involved farmers, an NGO and community radio stations in marketing farm products (honey, shea nuts, almond) of a farmer cooperative.
- **Stakeholders**: Farmers cooperatives in the Tominian region of Mali, a local NGO (Sahel Eco), two community radio operators, Radio Ségou and Radio Tominian.
- **Implementation**: Local NGO reps collates farm products available for sale using the RadioMarché platform. The platform generates audio communiqué(s) of the same information and publishes it on local PSTN for public access via telephone. Community radios have an option to broadcast the communiqué(s) via a Web interface.
- **Impact**: Through interviews with participants a number of successes were recorded:
  - Records of increased sales of some products from farmers (see e.g. http://vimeo.com/88218759).
  - Efficient record keeping for the NGO on products and sales of participant farmers.
  - In some cases increased demands for products due to the use of the system resulted in farmers’ inability to meet those demands because of some other factors such as weak value chains.
- **Future Research**: How to scale this is currently an on-going research objective. The aim is to find ways of overcoming many of the challenges of RadioMarché such as building localized, “plug ‘n play” and robust hardware for similar initiatives (Schlobach et al., 2014). Also includes discussions on research collaborations in future (e.g. between VU Amsterdam and UDS, Ghana.)

References


